

WHEN CHANGE LEADERSHIP IMPACTS COMMITMENT TO CHANGE AND
WHEN IT DOESN'T
A MULTI-LEVEL MULTI-DIMENSIONAL INVESTIGATION

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WHEN CHANGE LEADERSHIP IMPACTS COMMITMENT TO CHANGE AND
WHEN IT DOESN'T
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To my dear parents, my husband, and those who supported me along the way.

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SUMMARY

Recent research has urged more comprehensive theoretical development and empirical validation in the field of organizational change (e.g., Pettigrew, Woodman & Cameron, 2001). However, while numerous recommendations have been made on specific strategies and activities that leaders should employ to implement change effectively, very little change-specific leadership research has moved beyond descriptive and prescriptive perspectives (Higgs & Rowland, 2000; 2005). Moreover, the effects of change leadership behaviors have not been well tested with quantitative methods (for exceptions see Herold, Fedor, Caldwell, & Liu, 2008). Rather, the presumption in much of the change literature is that the change processes are leader-centric (Stacey, 1996), and that general change implementation models are suitable for most organizational change situations, based, to a great extent, on their face validity.

This study is aimed at further developing the change leadership construct and investigating its effect on employees' commitment to a particular change, along with investigating the moderating roles of leaders' general transformational leadership styles and subordinates' affective commitment to the larger organization. It involves 488 employees across 27 work units in 20 organizations that had recently experienced a change. The results for the change leadership measure suggest that change leadership behaviors encompass two factors—leaders' change-selling behavior and change-implementing behavior. Hierarchical linear modeling results indicate that the two aspects of change leadership have different effects on employees' affective commitment to change. While leaders' change-selling behavior was positively associated with affective

commitment to change ($p < .01$), the relationship between change-implementing behavior and commitment to change was not significant. In addition, the relationships between change leadership and employees' commitment to change are best explained by two three-way interactions. Specifically, leaders' change-selling behavior had fairly consistent effects on affective commitment to change in that it significantly increased commitment to change in three out of four conditions. In contrast, leaders' change-implementing behavior was only significantly related to affective commitment to change when employees were highly committed to the organization, and the leader was not categorized as a transformational leader.

To date, this is the first empirical investigation of employees' responses to change that has pointed to the importance of distinguishing between leaders' change-related selling and implementing behaviors. The different results for change selling and implementing behaviors help explain why previous examinations of change leadership, as a unitary construct, have failed to establish the empirical link between change leadership and commitment to change (see Herold et al., 2008), while such effects have been suggested by the long standing, practice oriented change literature. Results on the three-way interaction also provided a more comprehensive view of organizational change situations. Additional implications are discussed.

CHAPTER 1

INTRODUCTION

Change has become one of most important challenges for organizations and for their leaders at all levels. With the pressures from their external and internal environments—shifting business paradigms, economic and legislative changes, globalization, new technologies, and changes in consumer tastes and workforce composition—organizations often have to change the way they do business in order to grow, remain competitive, and even to survive (Herold & Fedor, 2008; Martins, 2008). Failure to manage change effectively may reduce organizational effectiveness and employee well being, and damage managers' careers (Business Week, 2005; Herold & Fedor, 2008).

Responding to the need for change and effective change implementation, the organizational change and development literature has provided numerous recommendations on strategies and behaviors that leaders can employ to implement change effectively (e.g., Lewin, 1947; Kotter, 1996; Amenakis, Harris & Field, 1999). Despite their popularity, however, a majority of these recommendations have been characterized as “acontextual, ahistorical and aprocessual” by scholars and researchers (Pettigrew et al., 2001: 697). That is, these recommendations are largely based on the authors' observations, experiences, and interpretations but lack a sufficient theoretical foundation and the necessary quantitative validation (Woodman, 1989; Beer & Walton, 1987).

The lack of theoretical development and empirical investigation is, in part, due to the absence of testable measures that capture the recommended change leadership behaviors (Herold et al., 2008). Given the large amount of literature on leading change, no testable construct has been offered until recently that captures key aspects of change leadership (i.e., Herold et al., 2008). Without an overarching construct, researchers and scholars have found little ground for further theoretical development and empirical testing.

In an effort to better understand the effects of change-specific leadership behaviors, Herold et al. (2008) developed a change-specific leadership measure that included such actions as creating a vision of the change; enlisting, empowering and monitoring employee participation in the change; helping with individual adaptation to the change; and providing feedback. While their effort revealed some of the important phenomena underlying leadership processes pertaining to organizational change, important questions remain.

First, a more complete theoretical development of the change leadership construct is still needed. The Herold et al. (2008) study was one of the first to investigate change leadership and its relationship to the more enduring transformational leadership. Further elaboration of the relationship between these two forms of leadership is required to establish the discriminate validity of change leadership. In addition, Herold and colleagues did not find the expected relationship between change leadership and commitment to change. This may be due to the fact that change leadership has been broadly defined in the change literature (e.g., Lewin, 1947; Kotter, 1996; Amenakis et al. 1999) and the measure used by Herold et al. (2008) attempts, in part, to assess this

breadth in a single scale. As such, a multidimensional scale would help better encompass change leadership behaviors and could provide additional insights on its effects on employees' responses to change.

Second, since it is a task-specific leadership construct, change leadership is anticipated to be moderated by the more global characteristics of the leader (i.e., transformational leadership) and the environment (Turner, 1991; Hogg & van Knippenberg, 2003). Herold et al. (2008) suggested that change leadership and transformational leadership interact to influence employee reactions to change, and the current study will continue to investigate how the more enduring transformational leadership moderates the episodic and situation-based effects of change leadership.

Third, as a relational construct, the effects of leadership (both change leadership and transformational leadership) require followers' cooperation (Hollander, 1995; Hogg & van Knippenberg, 2003). Although the leadership research articulates that followers' loyalty and support of and confidence in the leader are prerequisites of leadership effectiveness (Kerr & Jermier, 1978; House, 1977; Jung & Avolio, 1999; Howell & Shamir, 2005), it has often neglected the effects of larger social systems (e.g., the organization) within which the leader and the followers are embedded (Hall & Lord, 1995; Hogg & Martin, 2003; Lord, Brown & Harvey, 2001; Pawar & Eastman, 1997; Hogg & van Knippenberg, 2003). That is, although followers' loyalty to and satisfaction with their leaders makes those leaders more effective, it has not been well understood to what extent the followers' feelings about their organization will influence the effect of their unit-level leadership during organizational change.

Employees' affective organizational commitment is their emotional attachment to, value congruence with, and loyalty to the organization (Allen & Meyer, 1990; Meyer & Allen, 1991). Although organizational commitment has been shown to be an important correlate of commitment to change (Herscovitch & Meyer, 2002) and transformational leadership (Lowe, Kroeck, & Sivasubramaniam, 1996), it has not been taken into consideration by studies focusing on leadership in the context of organizational change. To understand the impact of organizational commitment on the effectiveness of work-unit-level leadership during organizational change, I investigate its contingency role on the effects of both change leadership and transformational leadership.

While Herold et al. (2008) focused on the moderating role of change leadership on the effects of transformational leadership, the current study takes a different approach in theory development and defines transformational leadership and organizational commitment as moderators of change leadership. The shift in theoretical approach is based on the different theoretical emphases of the two studies. The current study emphasizes change leadership as a situation-specific, event-based construct, which is defined as employees' evaluation of leader's behavior towards change as a specific event (Folger & Konovsky, 1989). In contrast, both transformational leadership and organizational commitment are entity-based and represent employees' evaluation of the objects (i.e., the leader and the organization) (Folger & Cropanzano, 2001; Choi, 2008). Such entity-based evaluations often serve as heuristic cues and influence people's interpretation of events involving the entity (Lind, 2001; van den Bos, 2001; Choi, 2008). Therefore, the effect of the leadership behavior towards a specific change (event-based

leadership) is likely to be moderated by entity-based transformational leadership and organizational commitment.

In summary, the purpose of the current study is two-fold. Building on the Herold et al. (2008) study, its first purpose is to further develop the construct of change leadership both theoretically and empirically. Previous research has primarily considered change leadership as a uni-dimensional construct while its factorial structure is yet to be explored. Herold et al. (2008) did not establish the anticipated empirical link between change leadership and change commitment. In the current study, a more inclusive change leadership measure is developed in order to better reflect change leadership behaviors.

The second purpose of this study is to create a more complete picture of change leadership effectiveness within organizational change contexts by examining the moderating roles of leaders' general transformational leadership style and employees' affective commitment to the larger organization. Specifically, I hypothesize that the effects of change leadership on change-related outcomes is contingent upon the strength of leaders' more general and cross-situational transformational influences, and that these unit level leadership effects are further moderated by the extent to which employees are affectively committed to the organization in general. Moving beyond the existing change implementation literature that tends to focus on prescriptive approaches, the current study brings together three areas of literature, each of which has important implications for organizational change but which have generally been investigated separately. This separation has fragmented our view of organizational change and rendered it incomplete.

The paper is organized as follows. In chapter 2, I overview the model and spell out the theoretical assumptions underlying the hypotheses. Chapter 3 provides an overview of the relevant literature on change leadership, transformational leadership, and organizational commitment. Theoretical development and hypotheses are elaborated in chapter 4, followed by the research methods (chapter 5) and a delineation of the results (chapter 6) sections. In chapter 7, I discuss the results and their implications. Finally, study considerations and future directions are provided in Chapter 8.

CHAPTER 2

OVERVIEW OF THE MODEL

The Outcome Variable — Affective Commitment to Change

In specifying a model to test the effects of change leadership, the first thing one must do is to identify a representative outcome variable. Research has focused on three general types of employee reactions towards change. The first type includes reactions with negative connotations about change, such as feelings of uncertainty (Ashford, 1988), loss of control (Ashford, Lee, & Bobko, 1989), fear of failure (Nadler, 1982), injustice (Shapiro & Kirkman, 1999), anger and frustration (Kiefer 2005), and resistance to change (Furst & Cable, 2006). Studies on these types of change-related attitudes have found that organizational justice (Greenberg, 1994), high-quality leader-member exchanges (LMX), and managerial influence tactics, including legitimization and ingratiation (Furst & Cable, 2006) are useful in avoiding and reducing such negative reactions towards organizational change.

The second group of outcomes involves more favorable reactions, such as readiness to change (Caldwell, Roby-Williams, Rush, Ricke-Keily, 2009; Rousseau & Tijoriwala, 1999) and openness to change (Wanberg & Banas, 2000). Research on these outcomes has found that influences are multi and cross level (Caldwell et al., 2009) and that employees' relational psychological contract (Rousseau, 1995; Rousseau & Tijoriwala, 1999), as well as high self-esteem, optimism, perceived control, and participation in the change decision process (Wanberg & Banas, 2000) are related to these positive reactions towards change.

The third type of change-related response goes beyond the absence of negative feelings and attitudes associated with change acceptance to include proactive and behavioral components—the intention to exert effort on behalf of the change (Herold et al., 2008)—which is true commitment to change (Armenakis, Harris, & Mossholder, 1993; Herscovitch & Meyer, 2002; Fedor, Herold, & Caldwell, 2006; Herold et al., 2008). Compared to the first two groups of change reactions and more general attitudes such as job satisfaction, commitment to change has been found to be a better predictor of specific change-related behaviors (Ford, Weissbein, & Plamondon, 2003; Herscovitch & Meyer, 2002; Herold et al., 2008). Given its advantages over other reactions to change, I selected commitment to change as the outcome variable of the current study.

Independent Variables

The independent variables of this study are change leadership, transformational leadership and employees' affective commitment to the organization. The link between change leadership behavior and commitment to change has been the long-standing core argument of change literature. This literature has contended that by engaging in certain strategies and activities change leaders can elicit positive responses and supportive behaviors from employees and these behaviors will then lead to successful change implementation. The leadership behaviors suggested by the change literature include creating a change vision, enlisting and encouraging employee participation in the change process, providing feedback regarding the change (Herold et al., 2008), communicating regarding the change (Armenakis et al., 1999), being fair (Greenberg, 1994; Caldwell, Herold & Fedor, 2004), providing change-related support (Caldwell et al., 2004), and

consolidating the change successes (Lewin, 1947; Kotter, 1996; Burke, 2002; Higgs & Rowland, 2005) . Although it has been widely accepted that such strategies and activities are essential in change implementation, their effects had not been well tested until Herold et al. (2008). Being the first to empirically test the direct effects of change leadership on commitment to change, Herold and colleagues did not find the expected direct effect of change leadership. To further establish this missing link between the practitioner-oriented recommendations on change implementations and change-related outcomes, a more valid change leadership measure is created to better capture change leadership behavior. Compared to the Herold et al. (2008) scale, the new measure not only includes leaders' efforts to consolidate the change successes, but also reflects previously ignored aspects such as procedural fairness (Konovsky & Folger, 1991; Greenberg, 1994; Caldwell et al., 2004), communication (Armenakis et al., 1999), and change support (Armenakis et al. 1999; Caldwell et al., 2004). With the new measure of change leadership, and based on the long-standing literature on the effects of change leadership, I propose that change leadership has a positive and direct effect on employees' commitment to change (H1).

While the change literature has focused on leadership behaviors in implementing a particular change, the leadership literature has often argued that transformational leadership is generally effective in organizational change (Avolio & Gibbons, 1988; Yukl & Howell, 1999; Bass & Riggio, 2006; Detert & Burris, 2007; Nemanich & Keller, 2007; Herold et al., 2008). By transforming followers' beliefs and values, transformational leaders are able to increase employee self-efficacy (Conger and Kanungo, 1988; Avolio & Gibbons, 1988; Shamir et al., 1993) and provide confidence that change can be

positive. Based on the substantial theoretical and empirical support of the effectiveness of transformational leadership in eliciting positive reactions towards work and change in general, I propose that transformational leadership will be positively related to employees' commitment to a particular change (H2).

In addition to its main effect on commitment to change, I anticipate that transformational leadership, as the more enduring and trait-like leadership style moderates the relationship between change leadership and commitment to change. This expectation is based on Leader Categorization Theory (e.g., Lord, Forti, & DeVader, 1984; Lord, Brown, & Harvey, 2001), which suggests that followers have general and task-specific leadership schemas. As the task-specific leadership behavior, leaders' change leadership behavior is compared to the more general leadership style. When the leader is rated as generally transformational, good change leadership behaviors will be seen as consistent with the leader's usual transformational leadership and will be attributed to the leaders' transformational style.

By contrast, when the leaders are not viewed as transformational, good change-leadership behaviors that are inconsistent with their usual leadership style will be attributed to the change-focused leadership efforts. Therefore, I propose that when leaders are categorized as transformational, change leadership behaviors will be less associated with employees' commitment to change. In contrast, when leaders are not seen as transformational, the specific leadership behavior pertaining to the change implementation will be more strongly related to commitment to change (H3).

The effects of leadership need to be better understood within an organizational context (Hogg & van Knippenberg, 2003; Pawar & Eastman, 1997; Howell & Shamir,

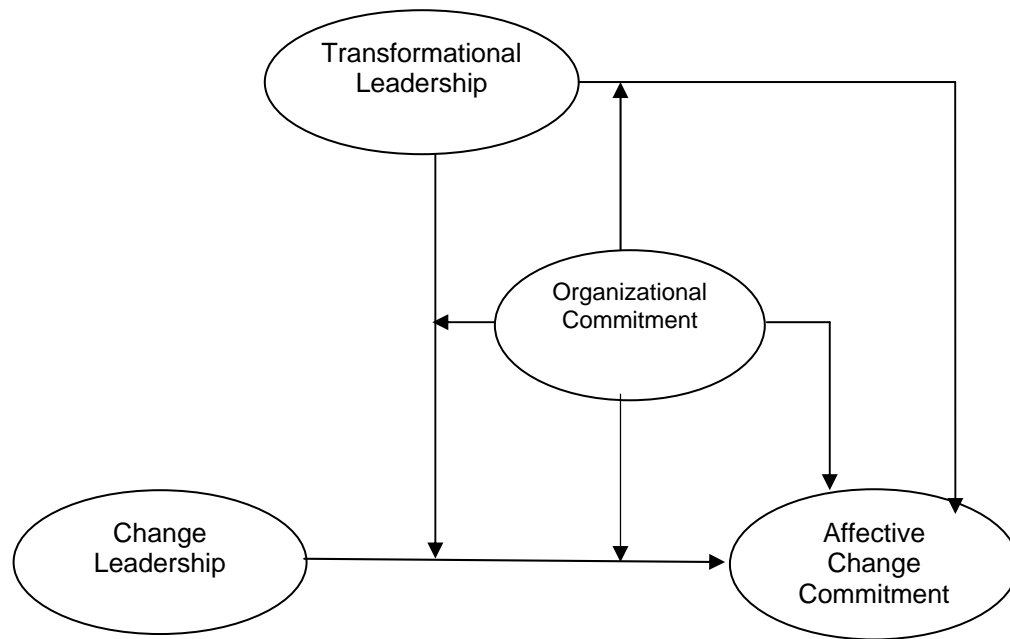
2005; Self, Armenakis, & Schraeder, 2007). Although leadership research has specified followers' loyalty, support, and confidence with the leader as prerequisites of leadership effectiveness (Kerr & Jermier, 1978; House, 1977; Jung & Avolio, 1999; Howell & Shamir, 2005), researchers studying change-related leadership behaviors must consider the organizational context within which the followers are embedded (Caldwell et al., 2009; Hall & Lord, 1995; Hogg & Martin, 2003; Lord et al., 2001; Pawar & Eastman, 1997; Hogg & van Knipenbergh, 2003; Self et al., 2007). The question, then, becomes whether the employees are committed to their leader or to the company ("boss vs. company") during organizational change.

Existing literature on commitment (e.g. Herscovitch & Meyer, 2002) suggests that one's affective organizational commitment is positively associated with both commitment to change and change-relevant behavior. Therefore, it is anticipated that those affectively committed to the organization will also report high affective commitment to change (H4). Based on the theory of organizational commitment (Allen & Mayer, 1990; Meyer & Allen, 1991; Solinger, van Olffen, & Roe, 2008), I also anticipate that affective organizational commitment will moderate the effects of both change leadership and transformational leadership. Specifically, the effects of both change leadership and transformational leadership are expected to be stronger for employees who report higher affective organizational commitment (H5 and H6, respectively). Finally, based on H3, H5, and H6, a three-way interaction effect among the independent variables is anticipated. Specifically, the interaction between unit level change leadership and transformational leadership will be stronger when organizational commitment is high, and weaker when the organizational commitment is low (H7).

In summary, the current study is aimed at bridging the change literature that concentrates on the change-implementation leadership behaviors, and the “mainstream” organizational literature that has focused on the more enduring influences of transformational leadership. Their combined influences are investigated in relation to employees’ affective commitment to the larger organizations. The overall model is depicted in Figure 1. The focal relationships investigated in this study are:

- (1) The direct effects of work-unit leader’s change-specific leadership behavior on employees’ affective commitment to a particular change;
- (2) The direct effects of work-unit leader’s general transformational leadership styles on employees’ affective commitment to a particular change;
- (3) The moderating effects of transformational leadership behavior on the change-specific leadership behavior;
- (4) The direct effects of employees’ affective commitment to the organization on their affective commitment to a particular change;
- (5) The moderating effects of affective organizational commitment on the change-specific leadership behavior;
- (6) The moderating effects of affective organizational commitment on the general transformational leadership style;
- (7) The moderating effects of affective organizational commitment on the interaction of both forms of leadership (change leadership and transformational leadership).

Figure 1
Overall Model



Control Variables

Research has shown that the magnitude of a change and the adaptation demands it places on employees are important correlates of change-related employee responses (Brockner & Wiesenfeld, 1996; Caldwell et al., 2004; Herold et al., 2008). For instance, some studies (e.g., Caldwell et al., 2004; Herold, et al., 2008) have suggested that, as a change becomes more disruptive, individuals may experience increased levels of uncertainty, fear of failure, or loss of control (Ashford, 1988; Ashford et al., 1989). In the absence of good transformational or change leadership, such experiences can negatively affect followers' attitudes towards the specific change in question.

The impact of change can take place at both the group and job levels. At the group level, Caldwell et al. (2004) reported that the consequences of change had an effect on employees' perceptions of their person-job fit. At the individual job level, Herold et al. (2008) found that commitment to change was influenced by the extent to which a change altered the nature of an employee's job. To avoid these potential problems, I control for the impact of change at both the work unit level (change consequences) and individual levels (personal job impact) in this study.

Key Assumption

Researchers have, for some time, debated the ontological issue of whether change is episodic or continuous (Weick & Quinn, 1999; Pettigrew et al., 2001; Tsoukas & Khia, 2002; Martins, 2008). The distinction between episodic and continuous change lies in the temporal boundaries of the change itself. Episodic changes are planned changes with discernable starting and ending points, while continuous changes are on-going processes

without such temporal boundaries (Pettigrew et al., 2001; Martins, 2008). To date, most of the literature has focused on episodic change, and most definitions of organizational change state that changes are planned episodes (Beckhard, 2006; Porras & Robertson, 1992). Such an episode-based definition of change is consistent with the distinction between change leadership and transformational leadership in this study. That is, change leadership behavior pertaining to a particular change has starting and ending points based on the change in question being a discrete event, while transformational leadership affects organizational life in general, and its influence is more enduring and cross-situational than change leadership. In other words, change leadership is episodic in nature and pertains to the particular change at hand, while transformational leadership is continuous and enduring, and its influence transcends all changes and other organizational events.

Levels of Analysis

Although organizational change has traditionally been viewed as an organization-level event (Armenakis & Bedeian, 1999; Johnson, 1996), a growing body of research has argued that change assessment must capture the more proximal impact of the change on the day-to-day routines and work procedures of individuals, and their immediate work units (Mohrman, Mohrman, & Ledford, 1990; Lau & Woodman, 1995; Caldwell et al., 2004) where middle managers often serve as critical change agents (Caldwell et al., 2009; Huy, 2002). Leadership research has argued that the leadership construct implies a group-level phenomenon in which the leadership effects are ambient stimuli on a group of followers (Kirkman, Chen, Farh, Chen, & Lowe, 2009; Hackman, 1992; Days, Gronn,

& Salas, 2006). As such, leaders of interest in this study exert an influence on all employees in the designated work unit (Herold et al., 2008). Therefore, in this study, both change leadership and transformational leadership are conceptualized and operationalized at the work-unit level. In contrast, commitment to change and affective organizational commitment are conceptualized at the individual level since they capture individual level intentions and attitudes towards the change and the larger organization.

CHAPTER 3

LITERATURE REVIEW

As indicated in chapters 1 and 2, one of the main purposes of the current study is to distinguish between the concepts of transformational leadership and change leadership as they relate to individuals' reactions to change. Specifically, change leadership is the specific leadership behaviors that focus on implementing a specific, discrete change at hand, while transformational leadership is a more trans-situational and general leadership style that penetrates a variety of organizational events, including, but not limited to, organizational change (Herold et al., 2008). Therefore, the literature reviews on these two types of change-related leadership behaviors are conducted separately.

Review of the Change Leadership Literature

Research pertaining to change leadership behavior mainly stems from the change implementation literature, which focuses on prescribing strategies and activities for successfully implementing organizational change (Woodman, 1989; Porras & Robertson, 1992; Armenakis & Bedeian, 1999). Compared to other areas, such as change content and change context (Pettigrew, 1987; Porras & Robertson, 1992; Armenakis & Bedeian, 1999), the change implementation literature has been regarded as one of the more developed areas in the field of organizational change and development (Martins, 2008).

The foundational framework of change implementation can be traced back to Lewin's (1947) 3-stage model, which conceptualized change as being comprised of three stages: unfreezing, changing, and refreezing. The unfreezing phase focuses on activities

that break down the status quo and develop a rationale as to why the change is necessary. The changing phase is where the actual change is implemented, while the refreezing stage is when the new ways of work are embraced, internalized and institutionalized (Lewin, 1947).

A number of change-implementation models and theories were built on Lewin's (1947) seminal framework. One of the most influential categories of change implementation theories is the Porras and Robertson (1987; 1992) typology, where the theories were organized according to levels of specificity and labeled as strategy theories, procedure theories, and technical theories. The strategy theories focus on very broad and general strategies for change implementation and have been criticized because they "do not appear to adequately provide a functional model for implementing and directing change in organizations" (Margulies & Raia, 1978: 45). The procedure theories prescribe the necessary steps for a complete change process and provide recommendations on how a change should be implemented. As the most specific category of the change implementation theories, technical theories primarily elaborate on the core steps identified by the procedure theories and have themselves been categorized into diagnostic theories, planning theories, intervention theories and evaluation theories (Porras & Robertson, 1992). Each of these sub-categories focuses on one of the primary steps of the procedure theory.

In analyzing sixteen pre-1990 procedure theories, Porras and Robertson (1992) found that the common steps in change implementation processes include client selection, entrance, contracting, formation of ideal model, diagnosis, goal selection, planning, action/intervention, monitoring and evaluation, and institutionalization/stabilization, and

that the most frequently recognized phases were diagnosis, planning, action/intervention, monitoring, and evaluation. Steps such as client selection, entrance, and contracting indicate that the pre-1990 procedural theories considered external consultants to be primary change drivers and change agents. During the 1990s, however, a number of stage-models focusing on internal managerial actions in change emerged. Such models include Judson's (1991) 5-phase model, Kotter's (1995) 8-step model, and Galpin's (1996) wheel of 9 wedges (Amenakis & Bedeian, 1999). The five stages proposed by Judson (1991) are analyzing, communicating, gaining acceptance, changing, and consolidating and institutionalizing, while Kotter's (1996) eight steps included establishing a sense of urgency, forming a powerful coalition, creating a vision, communication, empowering, planning and creating short-term wins, consolidating, and institutionalizing. Galpin's (1996) wheel of 9 wedges specified establishing the need, developing and disseminating a vision, diagnosing and analyzing, generating, detailing recommendations, pilot testing, preparing rolling out, rolling out, and measuring, reinforcing and refining the change (Amenakis & Bedeian, 1999). Common to these stage-based models is the similarity of their core content, where communication, visioning, action, and consolidation (institutionalization) have appeared most frequently.

In addition, although not stage-based in particular, Armenakis et al. (1999) proposed two models that identified strategies in transmitting change messages: persuasive communication, active participation, human resource management practices, symbolic activities, diffusion practices, management of internal and external information, and formal activities that demonstrate support for the change initiative.

Research during the 21st century has begun to stress the critical role played by managers as change leaders and has explored the links between leadership behaviors and change implementation (e.g., Caldwell et al., 2009). It is within this more recent literature that the term “change leadership” was coined (e.g., Higgs & Rowland, 2000; 2005; Caldwell, 2003; Herold et al., 2008). Using a triangulation of qualitative and quantitative methods, Higgs and Rowland (2005) suggested that change leadership behaviors be categorized into three broad categories: shaping, framing, and creating capacity. Specific change leadership behaviors identified in their study include making others accountable, establishing starting points for the change, designing a change journey, communicating guiding principles, and creating individual and organizational capabilities to embrace the change. Building on Kotter’s (1990; 1996) stage model, Herold et al. (2008) created a change leadership measure that encompasses visioning, enlisting, empowering, and monitoring, and tested it in conjunction with transformational leadership.

In their review of the pre-1990 change implementation theories, Porras and Robertson (1992) posited that, although there was a considerable amount of overlap on the core stages/phases/steps of change implementation theories, little agreement had been reached on the less fundamental parts of these models. This observation is also apt in the post-1990 change implementation models reviewed by Amenakis and Bedeian (1999) in which visioning, communication, elicitation of participation, monitoring, and consolidation are central. Lack of agreement on an overarching definition of the concept of change leadership has made it difficult to apply further theoretical development and

quantitative tests on the effectiveness of this construct in relation to organizational outcomes such as performance and employees' work-related attitudes and behaviors.

In addition to research that has focused on change leadership, research that examines employees' change-related attitudes and behaviors has shed light on leadership activities beneficial to successful change implementation. For instance, procedural justice (Konovsky & Folger, 1991; Greenberg, 1994; Brockner, Konovsky, Cooper-Schneider, Folger, Martin, & Bies, 1994; Caldwell et al., 2004); management support (Amenakis et al., 1999; Caldwell et al., 2004); leader-member exchange (LMX) (Furst & Cable, 2006; Self et al., 2008); perceived organizational support (Self et al., 2008); managerial influence tactics such as sanction, legitimization and ingratiation (Furst & Cable, 2006); and employee participation (Wanberg & Banas, 2000) are also recommended as strategies and activities that change leaders could utilize to promote change, reduce resistance, and ensure successful implementation. These recommendations have rarely been explicitly taken into consideration by change researchers and scholars.

These change-implementation models often argue that, if change leaders follow their recommendations and execute the proposed strategies, they will be successful in implementing change (i.e., Lewin, 1947; Kotter, 1996). However, change does not take place in a vacuum, and the study of change leadership behaviors should be investigated in context (Porrás & Robertson, 1992; Pettigrew et al., 2001). As the meta-analysis by Damanpour (1991) suggested, a successful change effort depends on the congruency or fit between the change and content, contextual, and process factors.

In summary, although change implementation theories have flourished for over 60 years, little progress has been made in terms of theoretical development and empirical testing (Pettigrew et al., 2001). Although the field has occasionally generated some new models, the effectiveness of these models has rarely been empirically investigated. In addition, failure to link the change implementation literature with the mainstream organizational behavior literature that deals with transformational leadership, organizational justice, and organizational commitment, has created gaps in both bodies of literature (Herold et al., 2008). To understand the phenomenon of organizational change more fully, scholars and practitioners need to enlarge the scope of exploration and take different leadership approaches and contingencies into consideration.

Review of the Transformational Leadership Literature

Transformational Leadership Defined

The concepts of transformational leadership and transactional leadership were introduced by Burns (1978) and applied to organizational management by Bass (1985). Whereas transactional leaders influence followers by setting goals, clarifying desired outcomes, and providing feedback and rewards, transformational leaders motivate followers by creating visions for the future of the organization and supporting performance that goes beyond expectations (Burn, 1978; Bass, 1985; Conger & Kanungo, 1988; House, 1977; Podsakoff, McKenzie, Moorman & Fetter, 1990; Yukl, 1999; Yukl & Howell, 1999).

Bass (1985; 1999) suggested that transformational leadership has four dimensions: charisma (idealized influence), inspirational motivation, intellectual stimulation, and individualized consideration. Charisma, also called “idealized influence,” is the extent to which the leader behaves in admirable ways that make followers want to identify with him/her (Bass, 1999). The inspirational motivation dimension focuses on leaders’ visioning of the organization that is appealing and inspiring to followers. Intellectual stimulation is the degree to which the leader challenges stereotypes, takes risks, and solicits followers’ ideas (Bass, 1999). Transformational leaders stimulate and encourage creativity in their followers, challenge followers with high standards, and communicate opportunities for and optimism about future goal attainment (Bass 1999). Individualized consideration is the degree to which the leader attends to individual follower’s needs, mentors and coaches the followers, and listens to their concerns (Bass, 1999).

Antecedents of Transformational Leadership

Research has identified antecedents of transformational leadership behaviors on both the organizational and the personal levels. At the organizational level, research has predominantly focused on the influences of organizational contextual factors on the emergence, operation, and effectiveness of transformational leadership (Avolio & Bass, 1988; Bass, 1985; Brynman, 1992; Pettigrew, 1987). A few conceptual models have been developed within which change, uncertainty, and crises are important for the emergence of transformational leadership. For instance, in the seminal work on situational antecedents for transformational leadership in organizations, Bass (1985) proposed that transformational leadership is most likely to emerge and to be effective in environments characterized by change, uncertainty and distress (Bass, 1998; Yukl & Howell, 1999). Similarly, in studying the impact of organizational evolution on leadership behaviors, Gibbons (1992) considered environmental complexity and scarcity to be external factors that influence an organization's need for transformational leadership. Shamir, House and Arthur (1993) suggested at least three organizational situations favorable to the emergence of charismatic leadership: (1) congruence between the organization's primary task (i.e., products being produced) and dominant social values (e.g., innovation, national pride); (2) low possibility of connecting extrinsic rewards with performance; and (3) crises involving high uncertainty. Yukl and Howell (1999) also proposed a number of organizational and contextual antecedents for the emergence and effectiveness of charismatic leadership, including turbulence, change,

early stage in organizational cycle (i.e., entrepreneurial), challenging organizational tasks, and ambiguous performance goals.

The emergence of transformational leadership is distinct from organizational receptivity to such leadership (Pawar and Eastman, 1997). Organizational receptivity refers to organizational members' responsiveness to the transformational leader's vision and attempts to align organizational members' self-interests with collective interests (Pawar and Eastman, 1997). Pawar and Eastman suggested that organizational adaptation orientation, task systems, organizational structure, and mode of organizational governance are potential determinants of organizational receptivity to transformational leadership. The central tenet of their theoretical framework is that the proposed contextual factors are congruent with the goals transformational leaders strive to attain. Specifically, they proposed that organizations with simple structures (i.e., low degree of departmentalization and high level of centralization) or adhocracy structures (i.e., high organic structure with little formalization of behaviors) (Mintzberg, 1979), and a clan mode of governance (where organizational members are socialized to work towards collective goals) are receptive to transformational leadership.

Empirical studies have found that the effects of transformational leadership are related to the types of organizations (e.g., Bass, 1985) and to the leader's hierarchical position (e.g., Bass, Waldman, Avolio, & Bebb, 1987). In a meta-analytic review of the Multifactor Leadership Questionnaire (MLQ) literature, Lowe et al. (1996) found that transformational leadership is more effective in public organizations than in private ones and more effective for lower-level leaders than for higher-level leaders. These somewhat

unexpected results urged for more investigation on the impact of other contextual factors (moderators) on the effectiveness of transformational leadership (Lowe et al., 1996).

Personal-level antecedents of transformational leadership include both intra-personal and interpersonal factors. At the intra-personal level, transformational leadership has been linked to dimensions of personality (Bono & Judge, 2004; Rubin, Munz & Bommer, 2005) and emotional intelligence (Rubin et al., 2005). In a meta-analysis on the relationship between the big-five personality characteristics and leadership, Bono and Judge (2004) found that extraversion was linked positively and neuroticism was linked negatively to all transformational leadership dimensions. They also found that transformational leadership was significantly positively related to conscientiousness, agreeableness, and openness to experiences. In studying how leaders' emotion-recognition ability (a dimension of emotional intelligence) and personality characteristics influenced performance of transformational leadership behavior, Rubin et al. (2005) found that emotion recognition (i.e., leaders' ability to perceive subordinates' emotion), positive affectivity (PA), and agreeableness positively predicted transformational leadership behavior. In their study, extraversion was found to moderate the relationship between leaders' emotion recognition and transformational leadership such that this relationship was stronger with increased levels of leader extraversion.

Research on interpersonal antecedents of transformational leadership has focused on the leader-follower relationship. For instance, Howell and Shamir (2005) argued that charismatic leader-follower relationships differ from traditional leader-follower relationships in that followers of a charismatic leader are willing to move beyond their self-interest for the sake of the team or organization. The authors posited that followers'

acceptance, approval, respect, and cooperation are likely to empower the leader, which, in turn, motivates the leader to engage in charismatic behaviors (Howell & Shamir, 2005).

Consequences and Mechanisms of Transformational Leadership

As an independent variable, transformational leadership has been argued to represent the most effective form of leadership (Rubin et al., 2005) and has been found to be positively associated with desirable outcomes at the individual, group and organizational levels (Lowe et al., 1996; Dvir, Eden, Avolio, & Shamir, 2002; Agle et al., 2006). For instance, Judge and Piccolo (2004) found that, compared to transactional and laissez-faire leadership, transformational leadership is an effective predictor of individual outcomes, such as positive attitudes, motivation, and performance, and that it has stronger effects on attitudes and motivation than on performance. A field experiment by Dvir et al. (2002) investigated the effects of transformational leadership on followers' performance and development (i.e., self-actualization needs, extra effort, internalization of organizational moral values, collectivistic orientation, and critical-independent thinking) and found that, compared to those who did not receive transformational leadership training, leaders who had received such training had a more positive impact on their immediate followers' development in terms of significant increases in critical independent thinking, extra effort, and self-efficacy. They also found that the transformational leadership training increased the performance of the leaders' indirect followers (those who do not directly report to leader).

Further, Groves (2005) found that leaders' charisma was positively related to followers' general openness to organizational change. Similarly, Herold et al. (2008)

found a positive relationship between transformational leadership and employees' commitment to a particular change, and Caldwell et al. (2009) found that transformational leadership related positively with change readiness.

With the well documented and consistent findings of positive effects of transformational leadership, studies have begun to examine the mechanism of such effects (e.g., Bono & Judge, 2003; Kark, Shamir, & Chen, 2003; Piccolo & Colquitt, 2006). Piccolo and Colquitt (2006) suggested that transformational leaders influence their followers through two major mechanisms—shaping followers' feelings about the leaders, and the feelings about themselves. Specifically, transformational leadership enhances followers' perceptions of trust in, satisfaction with, and organizational justice from the leaders (e.g., Kark et al. 2003; Pillai, Schreishheim, & Williams, 1999; Podsakoff et al., 1990; Piccolo & Colquitt, 2006), which, in turn, lead to favorable organizational outcomes. In support of this finding, Wang, Law, Hackett, Wang & Zhen (2005) found that perceptions of leader-member exchange (LMX) fully mediated the relationship between transformational leadership and performance. In addition, transformational effects can be explained by follower's increased levels of self-efficacy and group potency (Bono & Judge, 2003; Shamir et al., 1993; Sosik, Avolio, & Kahai, 1997; Piccolo & Colquitt, 2006). Yukl and Howell (1999) suggested that under conditions of ambiguous performance goals and when there is no link between extrinsic rewards and performance, followers' internal values, self-concepts and identities are more readily engaged by charismatic leadership and that such leadership has a stronger effect.

Besides followers' reactions to themselves and the leaders, research has also provided evidence on other mediators for the effects of transformational leadership

(Caldwell et al., 2009; Piccolo & Colquitt, 2006; Nemanich & Keller, 2007). Caldwell et al. (2009) found that more proximal effects of unit level procedural justice associated with change implementation mediated the more diffused effects of transformational leadership regarding change readiness. Piccolo and Colquitt (2006) developed and tested a model in which the effects of transformational leadership were mediated by followers' perceptions of core job characteristics (i.e., variety, identity, significance, feedback, and autonomy). They found that leaders who are seen as transformational motivated followers to see their jobs as more challenging and meaningful, which then led to higher task performance and more organizational citizenship behaviors. In a study focusing on transformational leadership in an acquisition situation, Nemanich and Keller (2007) found support for the mediating role of what they called a "climate of creative thinking" on the relationship between transformational leadership and followers' acceptance of an acquisition.

In summary, the construct of transformational leadership is well developed and has been studied extensively, and research has identified a number of antecedents and consequences related to the emergence and effects of transformational leadership. Although most studies have focused on the leaders' more general and cross-situational leadership behavior, transformational leadership and organizational change are closely linked such that organizational change appears to be one of the most important antecedents of the emergence and effectiveness of transformational leadership (Bass, 1985; Gibbons, 1992; Shamir et al., 1993). Transformational leadership has also been found to be particularly effective during organizational change (Groves, 2005; Nemanich & Keller, 2007; Herold et al., 2008; Caldwell et al., 2009).

Although the leadership literature has considered transformational leadership to be change-related (Pawar & Eastman, 1997; Detert & Burris, 2007), the research to date has not thoroughly studied leaders' behavior in terms of a particular change and has not linked attributes of transformational leadership to the change implementation processes. The result has been that the change implementation literature assumes that any leader could follow the prescribed implementation phases and be an effective change leader, while the transformational leadership literature seems to have taken it for granted that a transformational leader will exert relevant leadership behavior in any change situation, which, in turn, will lead to successful change implementation. As Herold et al. (2008) suggested, the failure of these two change-related approaches to intersect in this area has created a significant gap in the literature, so we lack a thorough understanding of the relationship between situation-specific change leadership and the more general and trans-situational transformational leadership, and their interactive effects on the change implementation processes.

Review of the Organizational Commitment Literature

Organizational commitment is the bond that links individuals to the organization (Mathieu & Zajac, 1990; Meyer & Allen, 1991, 1997). Research on organizational commitment can be traced back to the 1960s (Becker, 1960), when early conceptualizations of the construct tended to focus on one aspect of commitment at a time. For example, while some studies focused on individuals' emotional attachment to the organization (Mowday, Steers, & Porter, 1979), which was later named "affective commitment" in the literature (Meyer & Allen, 1991, 1997), others concentrated on commitment as a recognition of the costs associated with quitting (Becker, 1960), which was later labeled as "continuance commitment" (Meyer & Allen, 1991, 1997).

As research evolved to the multidimensional views of the commitment construct, the Three-Component Model (TCM) by Meyer and Allen (1991) gained substantial popularity. According to this model, organizational commitment is composed of three components: affective commitment, normative commitment, and continuance commitment (Meyer & Allen, 1991). Affective commitment refers to employees' emotional attachment to, identification with, and involvement in the organization; normative commitment reflects employees' feelings of obligation to remain with the organization; and continuance commitment is based on the calculation of the cost associated with leaving the organization (Meyer & Allen, 1991; Meyer & Herscovitch, 2001). Allen and Meyer (1990; Meyer & Allen, 1991) argued that, while each commitment component reflects a psychological state related to continuing or discontinuing membership in the organization, the nature of these states differs. Employees with strong affective commitment remain in the organization because they

want to, those with strong continuance commitment stay because they have no other options, and those with strong normative commitment stay because they feel they ought to do so (Allen & Meyer, 1990; Meyer & Allen, 1991, Herscovitch & Meyer, 2002).

The three components of commitment have been shown to be related to different behavioral outcomes (Herscovitch & Meyer, 2002). Meyer and Allen (1991; Allen & Meyer, 1996) posited that employees with high affective commitment are likely to attend work regularly, try their best to perform assigned tasks, and exert extra effort when needed. Those with normative commitment may behave in a similar way as those who are affectively committed if they see it as a part of their duty or a means of reciprocating for benefits received. In contrast, employees with continuance commitment may do little more than what is required to maintain employment (Meyer & Allen, 1991; Allen & Meyer, 1996).

Empirical research has also provided support for the distinctions among the three components of organizational commitment. A meta-analysis by Meyer et al. (2002) found that, although all three were negatively correlated with withdrawal cognition and turnover intention, only affective commitment was related to actual absenteeism. In addition, although both affective commitment and normative commitment were positively related to performance and organizational citizenship behaviors (OCBs), the relationship between affective commitment and performance and OCBs was stronger. Continuance commitment was negatively related to performance and not related to OCBs (Meyer et al., 2002).

Despite its popularity, the three-component model (TCM) of organizational commitment has been criticized in several ways. The first criticism aims at the definition

of commitment in TCM as too broad and unclear. For instance, Ko, Price, and Muller (1997: 970) suggested that the lack of “precise definition of commitment” leads to low reliability of the TCM scales. Solinger et al. (2008) argued that the Meyer et al. (Meyer & Allen, 1991; Meyer & Herscovitch, 2001; Meyer, Becker, & Vandenberghe; 2004) conceptualization of organizational commitment mixes the motivational and attitudinal components in the definition of commitment and that commitment should be conceptualized only as an attitude.

A second criticism of the TCM is that it is a self-contradicting conceptualization and is not fully consistent with empirical findings (e.g., Vandenberg & Self, 1993; Ko et al., 1997; McGee & Ford, 1987; Meyer et al., 2002; Solinger et al., 2008). In applying the TCM to South Korean samples, Ko et al. (1997) found that, while the construct validity of affective commitment was well supported, the validity of continuance commitment and normative commitment was questionable. Researchers have also raised concerns about the convergence validity of continuance commitment and the discriminate validity of normative commitment (e.g., McGee & Ford, 1987; Meyer et al., 2002; Solinger et al. 2008). In particular, McGee and Ford (1987) suggested that the continuance commitment construct contained two sub-dimensions—high sacrifice (i.e., high cost of leaving) and lack of alternatives (Solinger et al., 2008), and Ko et al. (1997) argued that the normative commitment partially overlaps affective commitment in that some of the antecedents of normative commitment are closely related to those of affective commitment (Solinger et al., 2008).

Based on these criticisms, Solinger et al. (2008) proposed that the definition of organizational commitment return to the single dimension of affective attachment to the

organization. Drawing on the theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) and Eagly and Chaiken's (1993) attitude-behavior model, Solinger et al. (2008) argued that only affective commitment truly reflects attitude towards the organization, and that continuance commitment and normative commitment should be defined instead as attitudes toward specific turnover behaviors. Solinger et al. (2008) further suggested that affective commitment is especially relevant when employees are expected to adjust to organizational change and to help organizations overcome difficulties.

In summary, although the TCM has been widely used in organizational research, some disagreement about its validity remains. Despite the controversy, researchers generally agree that affective organizational commitment is an effective predictor of various work-related outcomes, including performance and organizational citizenship behavior (e.g., Meyer et al., 2002; Herscovitch & Topolnytsky, 2002). While some have considered affective commitment to be the most important dimension of commitment (Herscovitch & Topolnytsky, 2002), others have argued that it should be seen as the only dimension of commitment towards the organization, while continuance and normative commitment are better conceptualized as attitudes towards staying or leaving (Solinger, et al., 2008).

CHAPTER 4

THEORETICAL DEVELOPMENT AND HYPOTHESES

Affective Change Commitment

The outcome variable of the current study is affective commitment to change. Based on the TCM of workplace commitment, Herscovitch and Meyer (2002) developed a model of commitment to change that parallels to the three dimensions of organizational commitment. In their model, Herscovitch and Meyer defined commitment to change as “a force (mind-set) that binds an individual to a course of action deemed necessary for the successful implementation of a change initiative” (475). Like in the TCM, Herscovitch and Meyer defined affective commitment to change as a belief in a change’s inherent benefit and the desire to provide support on its behalf, continuance commitment to change as the recognition of costs associated with not supporting the change, and normative commitment to change as a sense of obligation to provide support for the change (Herscovitch & Meyer, 2002). Compared to broader workplace outcomes such as job satisfaction, commitment to change has been found to be a better predictor of specific change-related behaviors (Ford et al., 2003; Herscovitch & Meyer, 2002; Herold et al., 2008).

Various scholars have noted the importance of commitment to change as a key to the success of change initiatives (e.g., Herscovitch & Meyer, 2002; Armenakis, Harris, & Field, 1999; Coetsee, 1999; Conner, 1992; Conner & Patterson, 1982; Klein & Sorra, 1996). Herscovitch and Meyer (2002) argued that commitment to change was “one of the most important factors involved in employees’ support for change initiatives”

(Herscovitch & Meyer, 2002: 474), while Conner et al. (1992) described commitment to change as “the glue that provides the vital bond between people and change goals” (p. 147) and that the “most prevalent factor contributing to failed change projects is a lack of commitment by the people” (Conner & Patterson, 1982: 18). In developing a model for innovation implementation, Klein and Sorra (1996) proposed commitment as a central component of their model of effective innovation implementation because it mediates the relationship between innovation values fit and implementation (Herscovitch & Meyer, 2002).

Unlike coerced compliance (i.e., continuance commitment to change) and sense of obligation (normative commitment to change), affective commitment to change is the willingness and intention to exert effort on behalf of the change (Fedor et al., 2006; Herscovitch & Meyer, 2002; Armenakis et al., 1993). It goes beyond merely positive attitudes toward the change by including behavioral elements, such as an intention to exert effort to support the change (Fedor et al., 2006; Herscovitch & Meyer, 2002; Armenakis et al., 1993; Herold et al., 2008). In this study, I investigate how employees’ affective commitment to change is influenced by change leadership, transformational leadership and affective commitment to the organization.

Change Leadership

Despite the large amount of literature on leading change, there has been no testable measure that captures the key elements of change leadership behaviors until recently (Herold et al, 2008). Herold et al. developed a change leadership construct based upon practice-oriented recommendations, including specific leadership behaviors

such as visioning, enlisting, empowering, monitoring, and helping with individual adaptation. These leadership behaviors are targeted at implementation of a particular change at hand, rather than at other organizational events.

The components of change leadership can be linked to other leadership theories, including transformational leadership and transactional leadership (Bass, 1985; Kotter, 1996; Herold et al., 2008). The visioning, empowering, and individual consideration elements of change leadership overlap with those of transformational leadership, while monitoring and providing feedback are typically associated with transactional leadership behaviors alone. However, there are several distinctions between change leadership and these general leadership behaviors. First, organizational changes are defined as “planned episodes,” (Tsoukas & Chia, 2002; Weick & Quinn, 1999; Beckhard, 2006; Porras & Roberson, 1992), and the influence of change leadership is episodic, rather than enduring and cross-situational. Whereas change leadership behaviors target at the specific change, transformational and transactional leadership behaviors are general and trans-situational influences on followers’ attitudes and behaviors and often have no clear boundaries or timeframes. In addition, since the purpose of change leadership is to elicit employees’ attitudes and behaviors to support the change, its influence is not expected to go beyond the specific change situation; transformational and transactional leadership, on the other hand, influence followers’ responses across situations (Bass & Avolio, 1988; Lowe et al., 1996).

The core argument of the extensive and long-standing change literature is that, by engaging in these change-specific leadership behaviors, change leaders are able to engender employees’ support for the change at hand, which will then lead to successful

change implementation (Kotter, 1996; Burke, 2002; Herold et al., 2008). In other words, by creating and communicating a change-related vision, involving employees in the change-specific decision-making, helping people deal with the challenges associated with the change, and providing regular feedback on the change process, change leadership is able to reduce change-related uncertainty and create valence of the change among employees. Given that commitment evolves from volition, motivation and attribution (Allen & Meyer, 1990), change leadership behaviors are expected to increase employees' commitment to the change initiative by motivating and creating positive volitions among employees (Kotter, 1996; Burke, 2002; Herold et al., 2008). Therefore, it is hypothesized that:

H1: Change leadership is positively associated with employees' affective commitment to a change.

As noted in previous sections, change leadership behaviors in the organizational change and development literature encompass the entire change processes, from initiation to consolidation (Porras & Robertson, 1987; 1992), and involve multiple steps in change implementations (Lewin, 1947; Kotter, 1996). Although the Herold et al. (2008) seven-item scale covers a wide range of the change leadership behaviors, several aspects of change leadership suggested by the literature were not included. For instance, procedural fairness (Brockner et al., 1994; Caldwell et al., 2009) and change support behavior (Caldwell et al., 2004) have both been found to be critical to effective change implementation, and thus should be considered as parts of change leadership behaviors.

In addition, the Herold et al. (2008) measure has focused more on the “unfreeze” and “change” stages, and did not include measures that reflect the “refreeze” stage such as “celebrate short-term wins” (Kotter, 1996), and creating organizational capacity to institutionalized the change (Higgs & Rowland, 2005).

To better capture the various leadership behaviors suggested by the literature, and to further explore the empirical link between change leadership and employees’ attitudes and behavior toward change, a more inclusive change leadership measure was constructed based on the change leadership literature reviewed in Chapter 3. Specifically, items that reflects leaders’ efforts to be fair during change (Konovsky & Folger, 1991; Greenberg 1994; Brockner et al., 1994; Caldwell et al., 2004), provide change-related support (Armenakis et al.,1999; Caldwell et al., 2004), communicate the change vision and change processes (Armenakis et al., 1993; 1999), encourage participants participation (Wanberg & Banas, 2000), and consolidate the change successes (Kotter, 1996; Higgs & Rowland, 2005) were created and included with the seven items constructed by Herold et al. (2008). The new scale consists of twenty-two items, which is expected to provide a more complete measure of the change leadership construct.

Transformational Leadership

While the change literature has focused on situation-specific and episodic change leadership behaviors, the leadership literature has posited that transformational leadership is particularly effective in environments characterized by high uncertainty and distress, such as times of change (Bass, 1998; Shamir et al., 1993; House & Aditya, 1997;

Waldman et al., 2001; Nemanich, & Keller, 2007). With few exceptions (i.e., Caldwell et al., 2009; Nemanich & Keller, 2007; Herold, et al., 2008), studies on transformational leadership do not investigate leader behaviors in terms of a particular change (Herold, et al., 2008) but assume that transformational leaders are naturally good at handling any change, regardless of the situation (Herold et al., 2008).

Transformational leadership has been shown to be associated with positive change responses (i.e., Bass, 1985; 1998; Kotter, 1990; 1996; Avolio & Gibbons, 1988; Yukl & Howell, 1999; Bass & Riggio, 2006; Detert & Burris, 2007; Herold et al., 2008).

Compared to change leadership, transformational leadership has more general influences on followers' attitudes and behaviors, and does not necessarily target responses to a particular change. Specifically, transformational leaders are able to transform followers' beliefs and values, create a vision of the future and inspire subordinates to work toward achieving it (Vera & Crossan, 2004). Through mechanisms such as personal identification with goals, internalization of values (Kelman, 1958; Wang et al., 2005), and promotion of creatively oriented organizational climates (Nemanich & Keller, 2007), transformational leaders are able to overcome the inertia that keeps individuals from working hard and adapting to new environments (Agle et al., 2006). These leaders are able to increase employee self-efficacy and instill the confidence that change can be positive (Conger & Kanungo, 1998; Avolio and Gibbons, 1988; Shamir et al., 1993). They motivate and inspire employees to overcome the uncertainty and anxiety caused by change and to maintain their job satisfaction and performance (Agle et al., 2006). As Shamir and Howell (1999) noted, the vision put forth by transformational leaders allows

followers to see opportunities in organizational change and provides them with hope and confidence in the future (Agle et al., 2006).

Researchers have also found empirical support for the link between transformational leadership and change-related attitudes. Grove (2005) found a positive relationship between leaders' charisma and employees' general openness to organizational change. Caldwell et al. (2009) demonstrated that transformational leadership style of Nurse Managers enhanced Registered Nurses' readiness for change. Nemanich and Keller (2007) found that transformational leadership was positively related to employees' acceptance of an acquisition. Herold et al. (2008) found transformational leadership to be a significant predictor of employee commitment to change.

Given the evidence on the positive effects of transformational leadership on employees' acceptance of change, I anticipate that transformational leadership will be positively related to employees' affective commitment to a change.

H2: Transformational leadership will be positively related to affective commitment to an organizational change.

Transformational Leadership as a Contingency of Change Leadership

As previously stated, change leadership and transformational leadership are conceptually distinct constructs. Whereas the concept of change leadership evolved from the change implementation literature that focuses on the episodic and discrete nature of change implementation, the leadership literature treats transformational leaders as generically good change leaders. Transformational leadership not only has been

considered effective during change, its influences on employees attitudes and behaviors also are more profound, enduring, and transcend a variety of situations beyond a single change (Bass & Avolio, 1988; Lowe et al., 1996). Existing literature suggests that the effects of transformational leadership often require a series of interactions between leaders and subordinates (Kelman, 1958; 1974; Yukl, 1999), but such a requirement does not exist for change leadership. These two types leadership behaviors have rarely been investigated simultaneously (Herold et al., 2008). While the change-implementation literature has tended to focus on only leaders' specific behaviors in terms of a particular change, leadership research has usually investigated the influences of the cross-situational transformational leadership alone (Herold et al., 2008).

One can argue that the lack of simultaneous examination has been detrimental for both the change implementation and the leadership literatures (Herold et al., 2008). By assuming that transformational leadership automatically transfers into everything needed for change implementation, leadership research has not been able to create a fully accurate picture of the effects of leadership behaviors during organizational change. Moreover, leaving out of consideration an important contextual influence of the change leadership effects—the leaders' cross-situational influences beyond a specific change—the change implementation literature has limited its scope and generalizability.

The ways that the two types of leadership influence a specific change are also posited to be different. While change leadership is directly targeted at followers' support of a particular change initiative, employees influenced by transformational leaders are expected to have a general openness and readiness for change. Those being led by a transformational leader are also expected to see changes as opportunities for personal and

organizational growth (Groves, 2005; Lau & Woodman, 1991; Shamir and Howell, 1999; Agle et al., 2006). Such openness to and readiness for change are supposed to transfer to commitment to a specific change episode.

Research suggests that the sense-making process of leadership follows the patterns identified in attribution theory (i.e., essentialism attribution) (Haslam, Rothschild, & Ernst, 1998; Medin & Ortony, 1989). That is, there is a tendency to attribute behavior to underlying dispositions that reflect invariant properties or essences of the individual personality. In other words, employees tend to compare the change-specific leadership behaviors to the leaders' more general leadership style during the change (Lord et al., 2001). When the leader is seen as a generally transformational leader, change leadership behaviors will be considered consistent with the leader's usual leadership style and the leader's change-focused behaviors (change leadership) will be attributed to the more invariant, trait-like transformational leadership (Haslam et al., 1998; Medin & Ortony, 1989; Hollander, 1964; Hogg & van Knippenberg, 2003; Choi, 2008). Therefore, the credit for managing the change well will be attributed to the general transformational leadership (Haslam et al., 1998; Medin & Ortony, 1989; Hollander, 1964; Kelley, 1967; 1973), and the effects of perceived change leadership on change commitment will be relatively weak.

In contrast, when the leader is not categorized as a transformational leader by the followers, by implementing a change strategically and tactically (i.e., exhibiting good change leadership), he/she should be able to engender commitment to the specific change commensurate with the change-specific leadership behaviors. Therefore, leaders who work to envision and communicate the change, who carefully manage and attend to the

change initiative, who involve employees in the implementation processes, and who are sensitive to individual needs as they go through the change are expected to be able to generate employee support for the change (Herold et al., 2008). Without the influences of transformational leadership, the essentialism attribution identified in attribution theory will not take place, and the credit for managing a particular change well will go to the episodic, situation-specific change leadership behaviors.

In summary, when the leader is not seen as transformational, the effects of the specific change leadership behaviors on employees' commitment to change will be strong and direct. When the leader is categorized as transformational across situations and also leads the focal change well, the effects will be attributed to transformational leadership, and the relationship between change leadership behavior and commitment to change will be weaker. Therefore, I anticipate that the positive relationship between change leadership and commitment to change will be stronger when the leader is rated low as a transformational leader than when the leader is rated high. Thus,

H3: Transformational leadership will moderate the positive relationship between change leadership and employees' affective commitment to change. Specifically, the effects of change leadership are stronger when the transformational leadership level is low than when the transformational leadership level is high.

Organizational Commitment as a Contingency of Leadership

Research on leadership has placed great emphasis on followers' trust, loyalty, support, and cooperation with the leader as important contingencies of leadership

effectiveness (House & Mitchell, 1974; Hersey & Blanchard, 1977; House, 1971; Kerr & Jermier, 1978; Fielder, 1967; Howell et al., 1986). However, the current research suggests that merely considering leadership effects in relationship to change may be insufficient. Although followers' loyalty and identification with their leaders make the leaders more effective, research also needs to consider the effects of the larger organization within which the followers are embedded (Hall & Lord, 1995; Hogg & Martin, 2003; Lord et al., 2001; Pawar & Eastman, 1997; Hogg & van Knippenberg, 2003).

The transformational leadership literature has focused on followers' identification with the leader and on congruence between the leader's and the follower's goals (Bass, 1985, Hogg & van Knippenberg, 2003; Bass & Riggio, 2006). Therefore, being identified by followers as a transformational leader is an indicator of social status within a group, the indices of capability to influence, and is indicative of leadership effectiveness. Followers' identification with, loyalty to, and confidence in transformational leaders are motivating in and of themselves. However, it is also important in the context of organizational change that followers identify with, are loyal to, and are confident in the organizations within which they work.

To date, neither the organizational change literature nor the leadership literature has investigated the moderating role of organizational commitment on leaders' effectiveness during organizational change. Instead, attention has been paid mainly to followers' attitudes toward and identification with the leaders themselves as contingencies of leadership effectiveness. This is a gap worth filling given that organizational commitment and its related construct (i.e., the psychological contract) have been linked

to employees' acceptance and commitment to organizational change (Herscovitch & Meyer, 2002; Rousseau & Tijoriwala, 1999), and that organizational commitment has been found to be closely related to transformational leadership (Lowe et al., 1996).

Among the three dimensions of organizational commitment, affective organizational commitment is the core component of organizational commitment models (Brickman, 1987; Brown, 1996; Buchanan, 1974, Solinger et al., 2008). Some authors (e.g., Solinger et al., 2008) have even gone so far as to argue that only affective organizational commitment reflects real commitment to the organization, whereas continuance commitment and normative commitment only represent attitudes towards specific behaviors, such as quitting.

Research has suggested that high affective organizational commitment indicates a general readiness to move forward with the organization (Brickman, 1987; Eagly & Chaiken, 1993; Herscovitch & Meyer, 2002), and a general tendency to perform a range of behaviors in favor of the organization (Solinger et al., 2008). During a change, such readiness and tendency will produce the positive attitudes and intention to exert efforts to support the change. For instance, Herscovitch and Meyer (2002) found that affective organizational commitment was positively associated with commitment to change and change relevant behaviors. That is, employees who are affectively committed to the organization are also likely to display favorable attitudes and supportive behavior towards organizational changes.

H4: Affective organizational commitment will be positively related to affective commitment to change.

In contrast to those who are affectively committed to their organization, employees who are not affectively committed to the organization do not have emotional attachment to the organization, congruent values or identification with their organization (Allen & Meyer, 1990). These employees tend to create a psychological distance between themselves and the organization (Brown, 1996; Solinger et al., 2008) and to be fairly insensitive to organizational events (Herscovitch & Meyer, 2002). If change-leadership efforts in particular, and transformational leadership efforts in general, both “fall on deaf ears,” then we would not expect either form of leadership to have much of an impact.

H5: Affective organizational commitment will moderate the effects of change leadership in that the positive relationship between change leadership and affective change commitment will be stronger when affective organizational commitment is high than when it is low.

H6: Affective organizational commitment will moderate the effects of transformational leadership in that the positive relationship between transformational leadership and affective change commitment will be stronger when affective organizational commitment is high than when it is low.

Finally, beyond the separate influences of organizational commitment on the two forms of leadership, a three-way interaction among these three factors is expected to exist. That is, for those who are affectively committed to the organization, the interaction

effects of the two forms of leadership should be stronger than for those who are not committed to the organization. Specifically, the effects of change leadership will be the strongest when the leader is not categorized as generally transformational and when the employees are highly committed to the organization. Therefore, I hypothesize that:

H7: Organizational commitment will moderate the interaction of change leadership and transformational leadership on affective commitment to change. Specifically, the interaction effects of transformational and change leadership will be stronger when employees' affective organizational commitment is high than when affective organizational commitment is low.

CHAPTER 5

METHODS

Sample

Data were collected from 27 different work units in 20 organizations in the southeast United States. The participating organizations were in a wide range of industries, including the federal government; real estate; telecommunications; healthcare; utility power transmission; IT services; aerospace/defense, industrial and business consulting; legal services; and entertainment. The reported sizes of the organizations ranged from 7 to 200,000, but about 74% (14 out of 20) of the organizations had less than 1000 employees. The reported work units involved in the study ranged in size from 7 to 280 employees, with an average of 64.

The methods of data collection and survey designs were consistent with the research conducted by Caldwell et al. (2004) and others (e.g., Fedor et al., 2006; Herold et al., 2007; Herold et al., 2008). A manager from each participating organization served as the contact person for the research project. The managers were asked to identify a specific change that had been recently completed or that was very close to completion, and to contact all potential respondents in the impacted work units. The potential respondents were then contacted by the manager either face-to-face or via written communications (e.g., memo or e-mail) in which the manager specified the change and change leaders being studied. In addition, they explained the nature of the study and assured potential respondents that participation was completely voluntary and anonymous. The two surveys designed for the study were uploaded on a website and the

participants were given a two-week window within which to respond. When a participant logged on to the website, information about the nature of the project and the change being studied and a consent form were provided. The participant was asked to enter the last name of the leader to which the participant would be referring and then was presented with one of the two surveys, chosen at random.

To minimize same-source biases, two surveys were designed for the study. The Organizational Survey captured individual perceptions of unit-level change-related phenomena, such as change leadership and the impacts of the change within each organizational unit (change consequences), while the Personal Survey measured individual characteristics of the participants, including their level of commitment to the organization and to the change. In addition, to avoid same-source bias that might arise in assessing the two types of leadership in the same survey, transformational leadership was measured in the Personal Survey and was later aggregated to the group level. In this way, it was possible to separate the assessment of change leadership and commitment to change, while also having the two types of leadership measured in separate surveys (Caldwell et al., 2004; Fedor et al., 2006; Herold et al., 2007; Herold et al., 2008).

In total, 834 employees were asked to participate in the research, and 252 Personal Change surveys and 236 Organizational Change surveys were completed, with an overall response rate of 58.5% (488 respondents). The number of respondents in each of the work units involved in the study ranged from 2 to 53, with an average of 18 employees. After matching the responses from the two surveys to the same leader in the same work unit, and eliminating data that could not be aggregated in the Organizational Survey because of low response rates in some units (i.e., less than 2 responses per unit),

190 individual level data from 25 work units were usable for cross-level analysis. Since both leadership behaviors and change-related factors are conceptualized at the unit (group) level in this study, data from the Organizational Survey and the transformational leadership measures from the Personal Survey were aggregated to the group level.

The level of completion reported for the change projects included in the study ranged from 75 to 100 percent, with a mean of 94.8 percent, and a median of 100 percent. The types of change initiatives identified for this study encompassed reorganization (21%), change in work processes (21%), productivity improvement or cost reduction (17%), new technology implementation (13%), changes in business strategy (13%), new leadership (8%), and other types of change, such as unit relocation and merger (7%). The method of including multiple changes in one study was used by Herscovitch and Meyer (2002), Caldwell et al. (2004), Fedor et al. (2006), Herold et al. (2007), and Herold et al. (2008) to increase the generalizability of the results.

Demographic information was collected using ranges rather than actual values to further ensure the anonymity of responses (Caldwell et al., 2004; Fedor et al., 2006; Herold et al., 2007; Herold et al., 2008). Sixty-three percent of respondents in the Personal Change survey were male, versus 59 percent in the Organizational Change survey. Respondents' ages, their tenure with the organization and in the current job are summarized in Table 1. As indicated by the statistics, the demographic similarities between the two surveys and the high response rates indicate that the managers had little bias in selecting change participants who were either in favor of or against the change in the work units (Caldwell et al., 2004; Fedor et al., 2006; Herold et al., 2007; 2008).

Table 1
Demographic Comparisons of the Two Surveys

		Personal Survey	Organizational Survey
Age	26-35 years	26.6%	25.8%
	36-45 years	33.7%	34.7%
	46-55 years	25.4%	27.1%
	> 55 years	9.9%	7.2%
Organizational Tenure	< 6 months	9.6%	6.4%
	6 mos. – 2 years	23.1%	23.7%
	2 - 5 years	27.1%	23.3%
	5 – 10 years	22.3%	25.4%
	> 10 years	17.9%	21.2%
Job Tenure	< 6 months	12%	9.8%
	6 mos. – 2 years	29.2%	34%
	2 - 5 years	31.6%	23.8%
	5 – 10 years	11.6%	17.4%
	> 10 years	15.6%	14.9%

Measures

Group Level

Previous research has suggested that there are three ways to measure group-level phenomena (Caldwell et al., 2004). The first way is to assess the perceptions of the individuals that comprise the group (e.g., our group does...). Kozlowski and Klein (2000) suggested that this assessment would generate the highest predictive validity since these responses are the most proximal to the individual-level assessment. However, this method would introduce same-source bias and common-method bias (Caldwell et al., 2004). The second way to measure group-level phenomena is to aggregate the individual responses to form a shared perspective (e.g., I feel...). When the group mean has been validated by within-group agreement and reliability and, therefore, represents meaningfulness of group membership, this method would reduce bias as well as predictive validity (Caldwell et al., 2004).

The third and the most conservative way to measure group-level phenomena is referred to as shared properties (Kozlowski & Klein, 2000) or referent-shift consensus (Chan, 1998). This method involves a completely separate set of individuals who experienced the same group-level influences in order to reduce same source biases (Caldwell et al., 2004; Fedor et al., 2006; Herold et al., 2007; Herold et al., 2008). The current study adopted this last method in that group-level and individual-level phenomena were assessed in different surveys (except for transformational leadership). Change leadership and change consequences (the group-level control variables) were measured in the Organizational Change Survey. To further minimize same-source bias,

transformational leadership was measured in the Personal Change Survey. Change leadership, transformational leadership, and change consequences were later aggregated to the group level to represent work-unit-level influences.

Transformational Leadership. Transformational leadership was measured by a 22-item scale developed by Podsakoff and colleagues (Podsakoff, MacKenzie, & Bommer, 1996; Podsakoff, MacKenzie, Moorman, & Fetter, 1990) ($\alpha = .96$). This scale assesses the extent to which employees of a particular work unit generally view their leader as a transformational leader (Rubin et al., 2005). It represents a shared conceptualization of transformational leadership behavior and fits the scope of the current study well. Sample items from this scale are: “My leader paints an interesting picture of the future for our group”, and “My leader shows respect for my personal feelings.” All items were measured on a 5-point Likert scale ranging from “strongly disagree” to “strongly agree”. The complete scale is listed in Appendix A.

Change Leadership. Illuminated by Herold et al. (2008), a 22-item scale ($\alpha = .97$) was constructed to better reflect the prescriptive behaviors suggested by the change literature. This scale not only includes items published in the Herold et al. (2008) study, but also accesses the extent to which the leaders handled the change in a fair (e.g., Konovsky & Folger, 1991; Brockner et al., 1994; Furst & Cable, 2006; Self et al., 2008) and supportive (Caldwell, et al., 2004) manner, communicated the change processes with participants (Amenakis et al., 1999), encouraged employee participation in change (Wanberg & Banas, 2000), along with the extent to which the change leader exerted efforts to consolidate (refreeze) the change success (Kotter, 1996). All items are listed in Table 2 along with exploratory factor analysis results. After removing the four cross-

loaded items, two factors emerged from the exploratory analysis. One of the factors focuses on leaders' effort to sell the change to participant during the "unfreeze" stage. All items began with "Related to the specific change we're studying, my leader..." and sample item include "...made it clear up front to those in our unit why the change was necessary", and "...built a broad coalition up front to support the change". This factor is labeled leaders' change-selling behavior ($\alpha=.92$). A second factor which emerged encompasses behaviors during the change implementation and consolidation processes, thus is labeled leadership change-implementing behavior ($\alpha=.95$). Sample items for change-implementing behavior include "...was fair in addressing any negative consequences resulting from the change implementation", and "...provided regular feedback on how the change implementation was going". More details regarding the factorial structure of the new change leadership scale is provided in the Analysis section below. Scales of the two change leadership behaviors used for subsequent analysis are listed in Appendix A along with the transformational leadership measure.

Consequence of Change (Control Variable). The group-level control variable, Consequence of Change, focused on the degree to which participants believed that the change was helpful or disruptive to the success of their work unit. The four-item scale was adopted from Caldwell et al. (2004) ($\alpha = .89$). All items had the lead-in of "this change . . .", and the items were "... made my work unit less effective," "...created problems for my work unit," "...has disrupted the way my unit normally functions," and "...has harmed my work unit." All items were measured on a 5-point Likert scale ranging from "strongly disagree" to "strongly agree".

Individual Level

Affective Commitment to Chang. The four items used were taken from the Herscovitch and Meyer (2002) scale of affective commitment to change ($\alpha = .87$). This scale was also used by Fedor et al. (2006) and Herold et al. (2008) as a measure of commitment to change. The items were: “I believe in the value of this change,” “This change is a good strategy for this organization,” “This change serves an important purpose for the organization,” and “Things would be better without this change” (reverse coded). All items were measured on a 5-point Likert scale ranging from “strongly disagree” to “strongly agree”.

Affective Organizational Commitment. Individuals’ affective commitment to their overall organization was assessed using three items ($\alpha = .80$) taken from Allen and Meyer (1990). The items were: “I do not feel a strong sense of ‘belonging’ to my organization” (reverse coded), “I do not feel like ‘part of the family’ at my organization” (reverse coded), and “This organization has a great deal of personal meaning for me.” All items were measured on a 5-point Likert scale ranging from “strongly disagree” to “strongly agree”.

Individual-Level Job Impact (Control Variable). A six-item scale ($\alpha = .78$) was adopted from Caldwell et al. (2004) to assess the individual-level control variable of the extent to which job demands increased as a result of the change; this scale was also used by Herold et al. (2008). All items had the lead-in of: “As a result of this change...”, and the items were “... I am expected to do more work than I used to,” “... the nature of my work has changed,” “... my job responsibilities have changed,” “... I find greater demands placed on me at work because of this change,” “... I am experiencing more

pressure at work,” and “... the work processes and procedures I use have changed.” All items were measured on a 5-point Likert Scale ranging from “strongly disagree” to “strongly agree”.

Analysis

Factorial Structure of the Change Leadership Measure

While the existing literature has considered change leadership as a unitary construct (e.g., Herold et al., 2008), Higgs and Rowland (2005) suggested that it could be multi-dimensional. In their qualitative study of leader's behaviors during change, Higgs and Rowland (2005) found that specific change leadership behaviors fit into three factors: shaping behavior, framing change and creating capacity. Given that in the current study, the newly developed change leadership scale encompasses more aspects that evolved from the change literature than that in the Herold et al. (2008) study, it is worthwhile to probe its factorial structure, and their subsequent relationships with the outcome variable—affectional commitment to change.

To explore the factorial structure of the new change leadership scale, a Principal Component Subtraction method was applied with a Varimax rotation. The factor structure that emerged is shown in Table 2. Using Eigen Value > 1 as a cut-off criterion for number of factors, the items loaded on the two factors. Among the 22 items, 4 items cross-loaded on both factors (i.e., loading differences < .20) and therefore were removed from further analysis. The seven items highlighted in bold letters are the items included in the Herold et al. (2008) study. Given that the two factors emerged are positively correlated ($r = .79$, $p < .01$), a Principal Axis Factoring method with Direct Oblimin Rotation (Fabrigar, Wegener, MacCallum & Strahan, 1999; Costello & Osborne, 2005) was applied. These two methods yielded identical sets of items for each factor. Examination of the items that loaded on each factor suggests that the two factors represent as change-selling and change-implementation. The change-selling factor

consists of 7 items that reflect leaders' attempts to promote the change during the unfreezing stage, such as "made it clear up front to those in our unit why the change was necessary", while the change implementing behaviors encompass those used to push a change forward and consolidate success throughout the implementation. In this analysis, three of the seven original items from the Herold et al. (2008) study loaded on the change-selling factor, three loaded on the implementation factor, with one item ("developed a clear vision for what was going to be achieved by our work unit") loaded on both factors.

Table 2

Exploratory Factor Analysis Results on Change Leadership

Related to the specific change we are studying, my leader...	Component	
	1	2
Developed a clear vision for what was going to be achieved by our work unit.	.519	.618
Made it clear up front to those in our unit why the change was necessary.	.343	.754
Made a case for the urgency of this change prior to implementation.	.170	.773
Successfully enlisted other to help with this change before we really started.	.254	.800
Effectively communicated the vision or the change prior to implementation.	.362	.734
Inspired people in the work unit to embrace the change.	.659	.549
Solicited input from those who were going to be affected by the changes.	.476	.629
Was effective at identifying supporters and opponents of the change prior to implementation.	.406	.681
Built a broad coalition up front to support the change.	.433	.733
Prepared people beforehand for adjustments they would have to make once the change was underway.	.476	.680
Was sensitive to how things actually were done “in the old days” prior to the change.	.706	.260
Was fair in addressing any negative consequences resulting from the change implementation.	.775	.367
Worked to minimize the impact of the change implementation on people in the work unit.	.759	.422
Kept everyone informed during the change implementation.	.664	.486
Helped people deal with the pain of change implementation.	.782	.405
Empowered people to implement the change.	.680	.442
Provided resources needed to support the implementation.	.713	.335
Provided regular feedback on how the change implementation was going.	.758	.379
Carefully monitored and communicated progress of the change implementation.	.741	.414
Gave individual attention to those who had more trouble with the change implementation	.815	.287
Modeled expected behavior for subordinate during implementation.	.767	.233
Celebrated short term wins during change implementation.	.741	.291
% of variance explained	29.61	38.54

Extraction Method: Principal Component Analysis

Rotation Method: Varimax with Kaiser Normalization

Note: Items in bold letters are the seven items used in the Herold et al. (2008) study

Confirmative Factor Analysis was performed to further validate the measurement model for the change leadership construct. The model fit indices (Kline, 2004) of a single factor model and two-factor model (change-selling and change-implementing) are reported in Table 3. Chi-square difference test ($\Delta\chi^2 = 139.96$, $\Delta d.f. = 2$, $p < .001$) indicated that the two-factor model fits the data significantly better than the single factor model, providing additional evidence that the change leadership construct is multi-dimensional in nature.

Table 3
Confirmatory Factor Analysis Results on Change Leadership

	Single Factor Model	Two-Factor Model
χ^2_M	586.39 (p<.01)	346.43 (p<.01)
d.f.	130	132
CFI	.96	.98
RMSEA	.12 with 90% CI(.11; .13)	.08 with 90% CI (.07; .09)

$$\Delta\chi^2 = 139.96, \Delta d.f. = 2, p < .001$$

Replication of the Two-Factor Model of Change Leadership

To test whether the factorial structure that emerged in the current study will hold across different samples, exploratory factor analysis was performed on an independent set of data of change leadership (N = 167) originally collected by Herold et al., (2008). Using the same methodology (i.e., split sample and cross-level design), the replication data were collected one year prior to the data used in the current study. The exploratory factor analysis results are shown in Table 4. As expected, two factors emerged from the analysis, showing similar loadings to that of Table 2 (the current study). Except for 3 items that had slightly different loading, 19 of the 22 items in the two data sets loaded on the same two factors that emerged. Specifically, the item “developed a clear vision for what was going to be achieved by our work unit” loaded on the change-selling factor in the replication sample, while it was cross-loaded in the current. In addition, two change-implement items—“carefully monitored and communicated progress of the change implementation” and “celebrated short term wins during change implementation” —were cross-loaded in the replication study. Despite the slight differences in item loadings, the connotations of the two factors that emerged were consistent across the two samples.

Table 4
Replication of the Factorial Model of Change Leadership

Related to the specific change we are studying, my leader...	Component	
	1	2
Developed a clear vision for what was going to be achieved by our work unit.	.201	.750
Made it clear up front to those in our unit why the change was necessary.	.199	.771
Made a case for the urgency of this change prior to implementation.	.196	.783
Successfully enlisted other to help with this change before we really started.	.435	.727
Effectively communicated the vision or the change prior to implementation.	.296	.809
Inspired people in the work unit to embrace the change.	.568	.643
Solicited input from those who were going to be affected by the changes.	.547	.528
Was effective at identifying supporters and opponents of the change prior to implementation.	.380	.613
Built a broad coalition up front to support the change.	.447	.721
Prepared people beforehand for adjustments they would have to make once the change was underway.	.386	.681
Was sensitive to how things actually were done “in the old days” prior to the change.	.743	.232
Was fair in addressing any negative consequences resulting from the change implementation.	.823	.228
Worked to minimize the impact of the change implementation on people in the work unit.	.814	.232
Kept everyone informed during the change implementation.	.638	.534
Helped people deal with the pain of change implementation.	.767	.352
Empowered people to implement the change.	.740	.306
Provided resources needed to support the implementation.	.677	.404
Provided regular feedback on how the change implementation was going.	.657	.419
Carefully monitored and communicated progress of the change implementation.	.600	.602
Gave individual attention to those who had more trouble with the change implementation	.764	.314
Modeled expected behavior for subordinate during implementation.	.671	.442
Celebrated short term wins during change implementation.	.388	.534
% of variance explained	32.89	32.99

Extraction Method: Principal Component Analysis
Rotation Method: Varimax with Kaiser Normalization

Data used for replication is collected from different samples (N=167), and was collected one year apart from the current study.

Confirmative Factor Analysis was also performed for the replication sample. The model fit indices of a single factor model and two-factor model (change-selling and change-implementing) are reported in Table 5. Chi-square difference test ($\Delta\chi^2 = 269.92$, $\Delta d.f. = 5$, $p < .001$) indicated that in the replication analysis, the two-factor model fits the data significantly better than the single factor model, providing additional evidence for the two-factor model.

Table 5
Replication Analysis of the Two-Factor Model of Change Leadership

	Single Factor Model	Two-Factor Model
χ^2_M	510.65 (p<.01)	240.73 (p<.01)
d.f.	104	99
CFI	.89	.97
RMSEA	.19 with 90% CI(.17; .20)	.11 with 90% CI (.09; .12)

$$\Delta\chi^2 = 269.92, \Delta d.f. = 5, p < .001$$

Validation of the Change Leadership Measures

To empirically distinguish between transformational leadership and change leadership, a series of statistical tests were performed to compare the distributions of the two scales. It is worth noting that it is common practice to empirically distinguish two constructs by performing a confirmatory factor analysis (CFA) to examine if the two construct are independent from each other. However, in the current study, CFA is not feasible given that change leadership and transformational leadership were accessed in different surveys with two different samples. The split sample design does not allow one to measure covariance between the two scales, which is necessary for CFA analysis (Kline, 2004). Therefore distribution comparisons are performed instead of CFA analysis. Essentially, given the close similarity of the two samples (i.e., demographics and work unit ambience), if the distributions of the two leadership scales are significantly different from each other, one can conclude that the two leadership constructs are empirically different from each other.

Table 6 and table 7 reports the scale distribution comparisons of change-selling behavior and transformational leadership, and change-implementing behavior and transformational leadership, respectively. Specifically, T-tests were used to compare the means, the skewness and the kurtosis. Levene's test was used to test the equality of variances, and the Mann-Whitney test was performed to compare the medians of the scales. Results on all tests indicate that neither leaders' change-selling behavior nor the change-implementing behavior have the same distribution with the transformational leadership scale, providing evidence of the independence between change leadership and transformational leadership in the current study.

Table 6
Comparisons of Distribution of the Leadership Scales

	Change-Selling Behavior	Transf. Leadership	T-value
Mean	3.11	3.65	10.11**
Median	3.14	3.80	6.61**
Variance	.86	.64	4.32*
Kurtosis	-.40	.64	6.20**
Skewness	-.27	-.86	6.84**

*p < .05, **p < .01

Table 7
Comparisons of Distribution of the Leadership Scales

	Change-Implementing Behavior	Transf. Leadership	T-value
Mean	3.16	3.65	9.16**
Median	3.32	3.80	6.09**
Variance	.89	.64	4.76*
Kurtosis	-.31	.64	6.29**
Skewness	-.20	-.86	7.13**

*p < .05, **p < .01

In addition, change leadership and transformational leadership were not significantly correlated at the group level ($r = .25$; $r=25$, $P > .05$, respectively for change-selling behavior and change-implementing behavior). Therefore, it is concluded that the overall change leadership and transformational leadership are empirically independent constructs. In other words, transformational leadership does not automatically transfer into a change situation in the eyes of participants, and a good change leader is not necessarily transformational across situations.

Validation of Group-Level Variables

Both forms of leadership are conceptualized at the group (work-unit) level, that is, they are ambient stimuli that exert similar influences on all employees in the designated work unit (Hackman, 1992). Zero-order correlations were computed for the variables within each level (i.e., individual or group). Research has suggested that data collected at the individual level should be validated with substantial within-group agreement, reliability, and non-independence before it can be considered to represent a shared group construct (James, 1982; Kozlowski & Hattrup, 1992; Klein and Kozlowski, 2000, Bliese, 2000).

Common practices of construct validation on group-level variables include the computation of r_{wg} , Intra-class Correlation I (ICC (1)) and Intra-class Correlation 2 (ICC (2)) (Bartko, 1976; James, 1982; Klein & Kozlowski, 2000). r_{wg} is the most frequently used measure for within-group agreement (Bliese, 2000); it assesses the degree to which raters provide essentially the same ratings on a scale (Kozlowski & Hattrup, 1992; Tinsley & Weiss, 1995, Bliese, 2000). The r_{wg} is calculated by comparing an observed

group variance to an expected random variance (James et al., 1984; Finn, 1970; Bliese, 2000). ICC (1) is an estimate of the proportion of the total variance of a measure that is explained by group membership (Bartko, 1976; James, 1982; Klein & Kozlowski, 2000). James (1982) also interpreted ICC (1) as the degree of reliability associated with a single assessment of the group mean and recommended using it as a criterion for aggregation (Bliese, 2000). ICC (2) measures the reliability of the group means within a sample (Bliese, 2000; Klein & Kozlowski, 2000). Both ICC (1) and ICC (2) are calculated using a one-way random effect ANOVA, where the variable of interest is the dependent variable and group membership is the independent variable (Bliese, 2000).

Hierarchical Linear Modeling

Hierarchical Linear Modeling (HLM) was used for data analysis in this study. Designed to test cross-level direct effect and moderating effect models (Hofmann, Griffin, & Gavin, 2000), HLM analysis is conducted as a simultaneous, two-stage process (Hofmann et al., 2000) by the software package. In level 1, the first stage, HLM analyzes the relationship among lower-level (e.g., individual-level) variables within each higher-level unit (e.g., group) and calculates the intercepts and slopes within each group. In level 2, the second step, HLM analyzes the relationship between the higher-level (e.g., group) variables and the intercepts and slopes for each group. In other words, the level 2 analyses treat variance in within-team intercepts as indicators of direct effects and treat variance in within-group slopes as indicators of moderation (Hofmann et al., 2000; Klein & Kozlowski, 2000).

CHAPTER 6

RESULTS

Table 8 reports descriptive statistics and zero-order correlations for the scales assessed at the group and individual levels, respectively. The median values of the r_{wg} values for transformational leadership (.89), change-selling behavior (.76) and change-implementing behavior (.80) indicated the strong agreement about each leader's change leadership and transformational leadership among participants in each work unit. ICC1s for all leadership measures were high at .17 for transformational leadership, .28 for change-selling behavior, and .30 for change-implementing behavior, indicating significant between-group variance (Bliese, 2000). Neither of the two sub-dimensions of change leadership was significantly correlated to transformational leadership at the group level ($r=.25$, $r=.25$, $p>.05$, respectively).

As shown in Table 8, the between-group variance in the individual-level dependent variable, commitment to change, was high ($ICC1 = .21$), providing evidence that it varied based upon the group to which the participants belonged. ICC1 for the individual-level predictor of affective organizational commitment was low (.12), suggesting that affective organizational commitment was not a function of group membership. Further, affective organizational commitment was significantly positively related to commitment to change (.437, $p < .01$), while personal job impact (the control variable) was not.

Table 8
Descriptive Statistics

	Mean	Std Dev	Rwg	ICC1	ICC2	1	1.1	1.2	2	3	4	5	6
Work Unit Level Variables													
1.Change Leadership	3.17	.54	.79	.28	.71	.97							
1.1Change- Selling	3.19	.52	.76	.28	.68	.94**	.92						
1.2Change- Implementing	3.32	.58	.80	.30	.72	.97**	.79**	.95					
2.Transformational Leadership	3.69	.45	.89	.17	.61	.26	.25	.25	.96				
3.Change Consequences	2.50	.75	.77	.30	.76	-.11	-.09	-.11	.167	.89			
Individual Level Variables													
4.Affective Org. Commitment	3.47	.97		.12	.49						.80		
5.Affective Com. to Change	3.87	.89		.21	.67						.44**	.87	
6.Job Impact	3.17	.89		.24	.71						.04	-.10	.84

**p < .01

N = 25, n = 190

Table 9 delineates the HLM analysis results. First, although change leadership was not significantly related to commitment to change, further examination of the two-factor model of change leadership revealed that the change-selling leadership behavior was positively related to affective commitment to change, and the change implementation factor was not, providing partial support for Hypothesis 1. In addition, as expected, both transformational leadership and affective organizational commitment were significantly positively related to commitment to change ($p < .05$ and $p < .01$, respectively), providing support for Hypotheses 2 and 4.

Since the two factors of change leadership had different effects on affective change commitment, to further explore the relationship among the independent variables and the dependent variable, the subsequent analyses were conducted on each factor separately. Specifically, the two-way interaction between change-selling behavior and transformational leadership, and the two-way interaction between change-implementing behavior and transformational leadership were not significant. As a result, there was no support for (H3). In addition, neither change-selling nor change-implementation interacted with organizational commitment to influence commitment to change; therefore Hypothesis 5 was not supported. The two-way interaction between organizational commitment and transformational leadership (H6) was not significant. Therefore, no two-way interactions were significant either for the overall measure of change leadership or when it was tested as its separate subcomponents of selling or implementing.

Finally, the three-way interaction among transformational leadership, change-selling and organizational commitment, and the three-way interaction among transformational leadership, change-implementation, and organizational commitment

were both significant ($p < .05$), providing support for Hypothesis 7. The 95% confidence intervals for all significant findings were computed with the equation $95\%CI = \mu \pm 1.96s.e.$ (Raudenbush & Byrk, 2002) and listed in Table 9.

Table 9
Results of Hierarchical Linear Model Analysis

<u>Controls</u>	Step 1	Step2	Step 3	Step3	Step4	95% CI
Personal Job Impact	.02	.03	.03	.04	.04	
Change Consequences	-.10	-.11	-.11	-.15	-.15	
<u>Main Effects</u>						
Change Leadership		.23				
Change-Selling			.47**	-.09	-.15	[.41, .53]
Change-Implementing			.23	-.14	-.17	
Transf. Leadership		.74**	.74**	.33	.29	[.67, .81]
Affect. Org. Commit		.33**	.33**	.34	.31**	[.21, .45]
<u>Two-way Interactions</u>						
Change-Selling x Transformational Leadership				.12	.14	
Change-Implementing x Transformational Leadership				.06	-.37**	
Transformational Leadership x Organizational Commitment				.06	1.22**	
Change-Selling x Organizational Commitment				-.03	1.48*	
Change-Implementing x Organizational Commitment				.04	1.38**	
<u>Three-way Interactions</u>						
Chg-Selling x Transf. L x Organizational Commitment					-.43*	[-.49, -.37]
Chg-Implementing x Transf. L x Organizational Commitment					-.40**	[-.44, -.36]

**p < .01, *p < .05

N = 25, n = 190

Note: Coefficients in bold letters represent results of hypothesized relationships with Change Commitment.

The HLM equations for the final model of Leader's Change-Selling Behavior, transformational Leadership, and Affective Organizational Commitment are:

Level-1 Model

$$Y = B0 + B1*(JOBIMPAC) + B2*(AFFCOMMI) + R$$

Level-2 Model

$$B0 = G00 + G01*(TFLDSP) + G02*(CHGSELL) + G03*(EFFECTIV) + G04*(TFXCHGSELL)$$

$$B1 = G10$$

$$B2 = G20 + G21*(TFLDSP) + G22*(CHGSELL) + G23*(TFXCHGSELL)$$

The HLM equations for the final model of Leader's Change Implementing Behavior, transformational Leadership, and Affective Organizational Commitment are:

Level-1 Model

$$Y = B0 + B1*(JOBIMPAC) + B2*(AFFCOMMI) + R$$

Level-2 Model

$$B0 = G00 + G01*(TFLDSP) + G02*(CHGIMP) + G03*(EFFECTIV) + G04*(TFXCHGIMP)$$

$$B1 = G10$$

$$B2 = G20 + G21*(TFLDSP) + G22*(CHGIMP) + G23*(TFXCHGIMP)$$

Where JOBIMPAC is individual level Job Impact, AFFCOMMI is Affective Organizational Commitment, TFLDSP is Transformational Leadership, CHGSELL is the Change Leader's Change-Selling Behavior, CHGIMP is the Change Leader's Change-Implementing Behavior, and EFFECTIV is work unit level Change Consequence. The outcome variable is Affective Commitment to Change.

In order to further examine the relationships among change leadership, transformational leadership, and affective organizational commitment, the three-way interactions were plotted. Common practice for graphing three-way, cross-level interactions is to disaggregate the group-level data down to the individual-level data, and then to compute three-way interactions using multiple regression (Dawson & Richter, 2006). Recent advancements in analyzing three-way interactions have suggested that researchers need to determine whether the slopes graphed are statistically different from one another (Aiken & West, 1991; Dawson & Richter, 2006).

Two sets of t-tests were involved in the slope-difference tests. The first set was used to determine whether the four slopes—(1) *high* transformational leadership and *high* affective organizational commitment, (2) *high* transformational leadership and *low* affective organizational commitment, (3) *low* transformational leadership and *high* affective organizational commitment, and (4) *low* transformational leadership and *low* affective organizational commitment)—in the graphs were different from zero. The second set of t-tests was performed to determine whether the six pairs of slopes were statistically different from each other.

As shown in Table 10 and Figure 2, for the three-way interaction among leaders' change-selling behavior, transformational leadership and affective organizational commitment, the pair of slopes that are different from each other were the *high* organizational commitment and *high* transformational leadership slope, and the *high* organizational commitment and *low* transformational leadership slope. The result is consistent with Hypothesis 7 and indicates that for organizationally committed employees, the effects of change-selling behavior were more salient to subordinates when

leaders were not categorized as transformational. In addition, for those who were not affectively committed to the organization, change-selling behavior was positively associated with commitment to change regardless of transformational leadership. In other words, for those who were not affectively committed to the organization, although the levels of commitment to change were lower on average than those who were committed to the organization, successful change-selling behavior was able to significantly increase employees' commitment to change.

Table 10

Results of Slope Differences Tests for the Three-way Interaction among Leader's Change-Selling Behavior, Transformational Leadership and Affective Organizational Commitment

Slope	t-value
1	1.00
2	3.03**
3	2.08*
4	2.10*

Pair of slopes	t-value
(1) and (2)	-1.99*
(1) and (3)	-1.08
(1) and (4)	-0.61
(2) and (3)	.38
(2) and (4)	.24
(3) and (4)	.72

** $p < .01$, * $p < .05$

Slope 1 represents the *high* transformational leadership and *high* affective organizational commitment.

Slope 2 represents the *high* transformational leadership and *low* affective organizational commitment.

Slope 3 represents the *low* transformational leadership and *high* affective organizational commitment.

Slope 4 represents the *low* transformational leadership and *low* affective organizational commitment.

Figure 2
The Three-Way Interaction among Leaders' Change-Selling Behavior, Transformational Leadership and Affective Organizational Commitment on Change Commitment

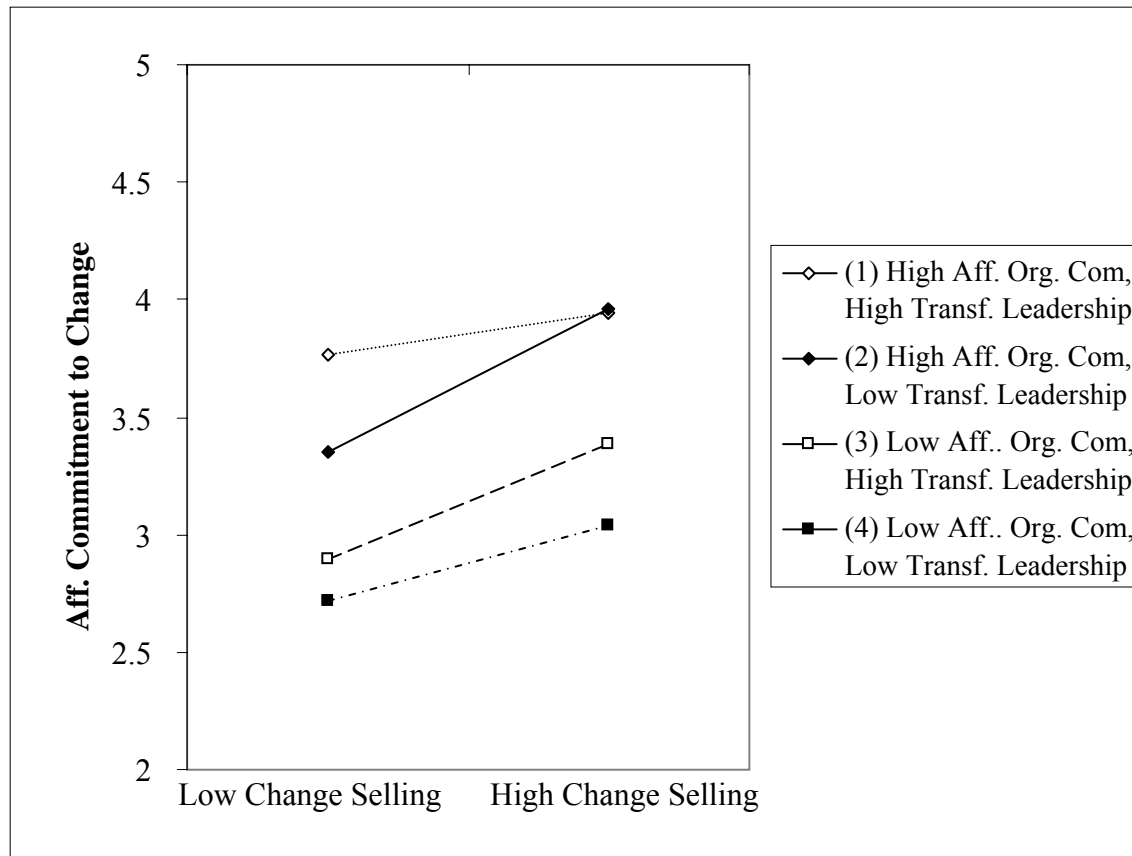


Table 11 and Figure 3 present the results of the slope difference tests for the three-way interactions among leaders' change-implementing behavior, transformational leadership, and affective organizational commitment. Two pairs of slopes were different from each other. First, the slope of *high* organizational commitment and *high* transformational leadership is different from that of *high* organizational commitment and *low* transformational leadership, indicating that for organizationally committed employees, the effects of change-implementing behavior were stronger when the leader was not categorized as transformational. This is consistent with what was expected in Hypothesis 7, and the three-way interaction among change-selling behavior, transformational leadership and organizational commitment. Therefore Hypothesis 7 is fully supported.

The second pair of slopes that are different from each other is the *high* organizational commitment and *low* transformational leadership slope, and the *low* organizational commitment and *low* transformational leadership slope. This result suggests that in absence of transformational leadership, organizational commitment and leaders' change-implementing behavior can work together to significantly increase employees' levels of commitment to change.

Results on the three-way interaction among leaders' change-implementing behavior, transformational leadership, and affective organizational commitment clearly shows that only when employees were highly committed to the organization and transformational leadership was rated low, leaders' change-implementing behavior was positively associated with employees' affective commitment to change. Compared to the

more consistent effects of leaders' change-selling behavior across situations, the effects of change-implementing behavior seem to be more limited.

Table 11

Results of Slope Differences Tests for the Three-way Interaction among Leader's Change-Implementing Behavior, Transformational Leadership and Affective Organizational Commitment

Slope	t-value
1	.55
2	2.81**
3	.68
4	1.29

Pair of slopes	t-value
(1) and (2)	-2.19*
(1) and (3)	-0.15
(1) and (4)	-0.42
(2) and (3)	1.88 ⁺
(2) and (4)	2.21*
(3) and (4)	-0.30

** $p < .01$, * $p < .05$, ⁺ $p < .1$

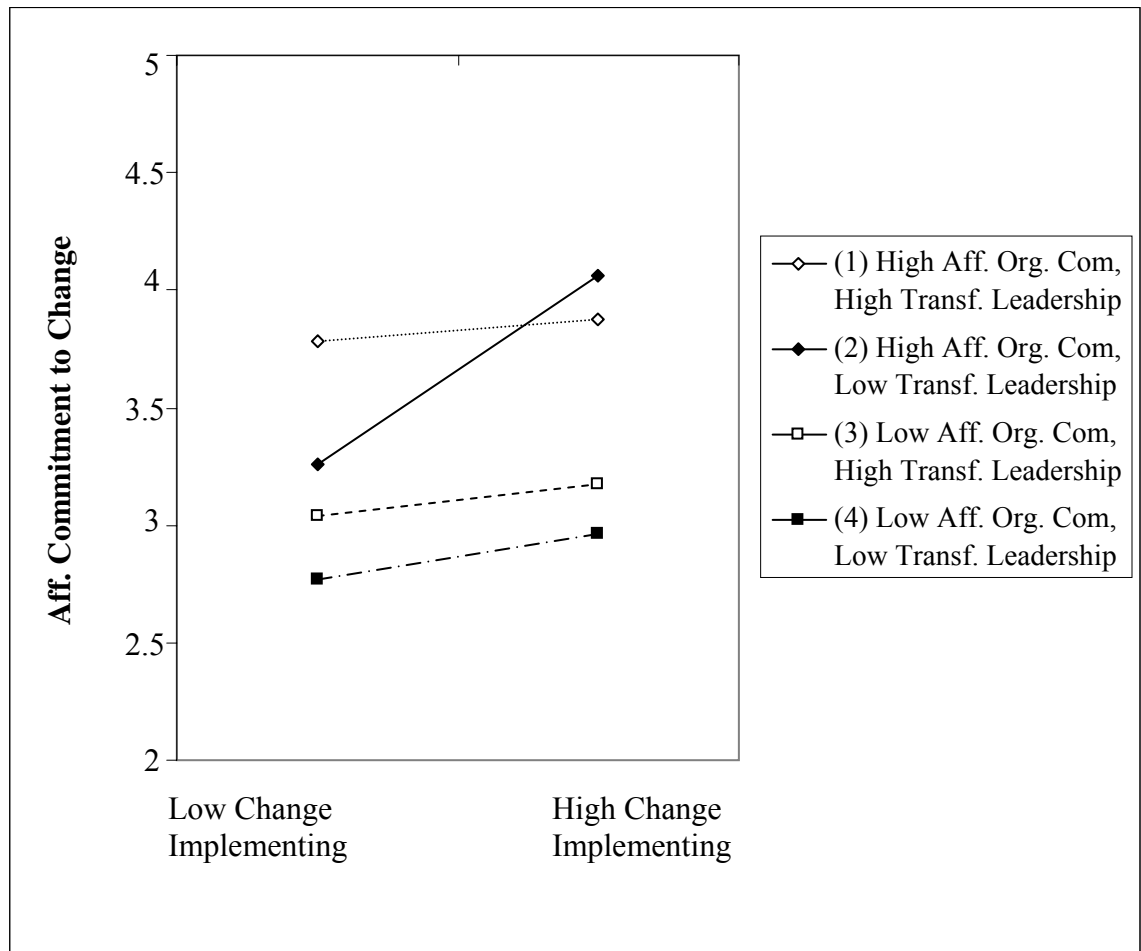
Slope 1 represents the *high* transformational leadership and *high* affective organizational commitment.

Slope 2 represents the *high* transformational leadership and *low* affective organizational commitment.

Slope 3 represents the *low* transformational leadership and *high* affective organizational commitment.

Slope 4 represents the *low* transformational leadership and *low* affective organizational commitment.

Figure 3
The Three-Way Interaction among Leaders' Change-Implementing Behavior,
Transformational Leadership and Affective Organizational Commitment on Commitment
to Change



CHAPTER 7

DISCUSSION

This study is a response to the call for stronger theoretical development of the organizational change and development literature (Woodman, 1989; Sashkin & Burke, 1987; Pettigrew et al., 2001; Martins, 2008). The change leadership construct was further refined and investigated with two key contingencies, transformational leadership and participants' affective commitment to the larger organization. The findings help fill the following gaps in the current change and leadership literature.

First, although the literature has primarily considered change leadership as uni-dimensional, the current study suggests that it encompasses at least two sub-dimensions: the change-selling behavior and the change-implementing behavior. The change-selling dimension reflects leaders' efforts to promote and sell a particular change to participants, and the change-implementing dimension includes leadership behavior designed to move the change forward and consolidate success throughout the change processes (Burke, 2002). The exploration of the two-factor model of change leadership also uncovered the empirical link between change leadership and affective change commitment that previous research failed to reveal. The change-selling behavior was positively associated with affective commitment to change, while a direct effect was not found with the change-implementing behavior. The different effects of these two sub-dimensions of change leadership are consistent with a classic distinction made in the management literature (i.e., Hersey & Blanchard, 1982, O'Reily & Caldwell, 1981). Specifically, the selling efforts (i.e., visioning and creating the need for change) work to

create intrinsic needs and valence of change (Burke, 2002). Such intrinsic needs and valence are the “motivators” for change, which in turn, were expected to lead to positive change-related outcomes such as affective commitment to change (Herzberg, 1964; O'Reily & Caldwell, 1981; Evans & Price, 1999). In contrast, leaders' implementing behaviors (i.e., feedback, monitoring, and providing change-related support) are more likely to be perceived as transactional and external drivers to move the change forward (Burke, 2002; Herold & Fedor, 2008). Such external drivers, similar to work conditions, are hygiene factors during change (Herzberg, 1964). While the lack of hygiene factors may lead to dissatisfaction, their presence does not necessarily generate motivation (Hackman & Oldham, 1976) to support the change.

Second, along with leaders' change-selling behavior, the more enduring influences of transformational leadership and employees' affective commitment to the organization also had direct effects on attitudes toward a specific change (i.e., commitment to change). Apparently, what pre-exists the actual launch of a change sets the tone for the change implementations. In other words, whether an employee is going to be affectively committed to a particular change has been partially determined before a change is actually implemented. These findings may explain why leaders can “do change by the book” but still be left trying to determine why their employees chose not to follow (Herold & Fedor, 2008). If the change is not well sold to the employees, or if we do not consider the degree to which the leader is transformational and to which the employees' are affectively commitment to the larger organization, it is far more difficult, if not impossible, to predict employees' level of commitment to change from how well the change was implemented. Also, leaders will generally enjoy a higher level of

commitment to change if they are dealing with a group of employees who care about the larger organization, which in turn, makes the change leader's job easier.

Third, the picture that emerges from investigating the moderating roles of transformational leadership and affective organizational commitment provides a view of organizational change that transcends simple and "quick-fix" types of prescriptions and moves us closer to the complex and contingent reality of today's organizations. By bringing together these three important, but often separately studied influences on commitment to change, we can begin to appreciate more fully the situations faced by those charged with leading change.

The results for the three-way interaction among leaders' change-selling behavior, transformational leadership, and affective organizational commitment suggest that change-selling behavior had a positive effect across different situations. Even for employees who were not affectively committed to the larger organization, good change-selling behavior was able to significantly increase affective commitment to change, regardless of whether the leader was seen as transformational or not.

The importance of leaders' change-selling behavior is documented in the literature, as many change management models include such activities such as creating a sense of urgency (Kotter, 1996), and establishing the need for change (Galpin, 1996). However, the criticality of change selling-behavior in terms of getting support from subordinates has not always been recognized in the change literature. In some treatments of selling, the focus has been primarily on upward influence (March & Shapira, 1982; Dutton, Ashford, O'Neill, & Lawrence, 2001). The results in the current study suggest

that selling a change to followers is at least as important as selling it to top management when it comes to successful change implementation.

The three-way interaction among leaders' change-implementing behavior, transformational leadership, and affective organizational commitment shows that the change-implementing behavior was only positively related to affective change commitment under the condition of high affective organizational commitment and low transformational leadership. That is, the implementation behavior itself had limited impact on commitment to change. The only time it was positively related to employees' commitment to change is when the employees were affectively committed to the larger organization and the leader was not perceived as transformational. This finding sheds light on the ongoing debate regarding the temporality of organizational change, which has focused on change as either a discrete event or a continuous process (Tsoukas & Chia, 2002; Weick & Quinn, 1999; Martins, 2008).

Many researchers have argued that organizational changes are discrete events with clear start and end points, and that implementation efforts targeted at a specific change should work in eliciting employee support regardless of other influences. In contrast, the results of current study suggest that the change-implementing behavior enacted after a change has started may have limited impact on employees' attitudes and behavior towards a particular change. In addition, given the increased frequency with which organizations undertake changes, employees may develop a perception of "a flow of change" that is more continuous and cumulative in nature (Weick & Quinn, 1999). In other words, although one particular change may be a discrete event, employees may experience several changes in a row whose borders are blurred thus creating the feeling

of continuous change. In such circumstances espoused implementation strategies may not have expected effects.

The key question for researchers may not be whether organizational change is continuous or episodic since the reality in organizational life today is that change is an ongoing process. Instead of merely focusing on pushing a particular change forward by providing support, communicating the change process, and being fair, etc., it is more important that leaders create a general favorableness toward change by being transformational, and enhancing the emotional bond between employees and the organization. If none of these long-term influences are available, at least selling the specific change to the employees up front can help to gain some commitment to it.

The results also indicate that ratings of change leadership and transformational leadership were not significantly correlated at the group level. This suggests that transformational leaders are not automatically seen as being good change leaders; at the same time, good change leaders do not have to be transformational in order to positively influence organizationally committed employees (Herold et al., 2008). Leaders who are seen as transformational might prefer a high correlation between these leadership ratings, but leaders seen as less transformational can still be viewed as good leaders for a particular change. Perhaps, if one is seen as a good change leader over a significant period of time, he or she will be categorized as a transformational leader.

While leaders' change-selling behavior and transformational leadership style are found to directly relate to commitment to change, this is only part of the story. We need to consider the extent to which employees are emotionally attached to the organization and how well the change is led. If the employees couldn't care less about the

organization, then either form of leadership will have limited effects on employees' commitment to change. Although the results indicate that change-selling behavior was able to significantly increase affective commitment to change for those low on organizational commitment, the average level of commitment to change under such conditions was very low.

This view supports the leadership literature's contention that followers play an important role in leadership effectiveness (Hollander, 1993; Howell & Shamir, 2005) and helps explain why leaders can often do all the right things over significant periods of time (i.e., be good transformational leaders) and yet see little return from their efforts when it comes to change initiatives. These results also help provide insight into why managers often have a healthy level of skepticism about leadership training that ignores the importance of followers. Clearly, context in the form of employees' affective organizational commitment matters a lot.

Unfortunately, levels of organizational commitment might be the most difficult of the three predictors of success in implementing change to alter. It is one thing to teach leaders to be better at selling change initiatives or to be more transformational, but it is quite another to influence the employees' overall affective feelings about their organization. Employees' commitment to their organizations has a lot to do with congruence in employees' and organizational values (Finegan, 2000), satisfaction of needs (Gleitman, 1981; Wanous, 1992; Meyer & Allen, 1991), and person-job fit (Meyer & Allen, 1991) over a considerable period of time. The impact of organizational commitment and its tendency to be somewhat stable over time is why it has been referred to as a "context" that will affect the success of the two leadership types included in this

study. As such, we need to think beyond leadership and pay attention to the effects of leadership and other related systems (e.g., socialization, pay and promotion) over time in terms of having an organization that can continuously and effectively respond to change.

To date, the connection between organizational commitment and leadership on one hand, and their effects on commitment to change on the other has not received the attention it deserves. Beyond followers' personalities (House & Mitchell, 1974), experience, skills, confidence (House, 1971) and job characteristics (Kerr & Jermier, 1978; Colquitt and Piccolo, 2006), researchers need to enlarge the scope of followers' characteristics to their relationship with the larger organization. The inclusion of this relationship in change-related research sheds an entirely different light on the assumption that either transformational or change leadership will be effective for all employees (Bass, 1996; 1997; Yukl, 1999; Kotter, 1996; Brockner et al., 1994); if employees do not care about their organizations, leaders will face an uphill battle.

CHAPTER 8

STUDY CONSIDERATIONS AND FUTURE DIRECTIONS

This study has its strengths and limitations. First, a more inclusive measure of change leadership was developed. The differentiation of change leaders' selling and implementing behaviors appears to provide an important piece of the change leadership puzzle. Given that change is an ongoing process and change leadership involves behaviors that are at least somewhat time-bonded, the two-factor model of change leadership paves the road for future research when it comes to the sequential effects of leadership during organizational change.

A second strength is that I examined the two distinct types of leaderships' influences on followers within a change context from a multi-level perspective, where leadership was conceptualized and operationalized at the group-level, while followers' reactions were assessed at the individual level. Research on leadership has suggested that leadership phenomena are better understood through multi-level investigations (Kirkman et al., 2009; Day et al., 2006). The change literature has also suggested that the most meaningful aspects of change success or failure often take place at the work-group level (Caldwell et al., 2004). Therefore, investigating leaders and followers within the context of organizational change using a multi-level approach allows us to draw more realistic conclusions because leaders' actions that are often focused on the entire work group.

A third strength is that the two-survey, split-sample design made it possible to minimize same-source biases (Klein & Kozlowski, 2000; Caldwell et al., 2004). The two leadership constructs—change leadership and transformational leadership—as well as

change leadership and commitment to change were measured in separate surveys, which further strengthened the confidence in the three-way interactions that were found such that the findings are cross-level and cross-sample. Such findings are somewhat rare in the organizational literature.

Fourth, by controlling for the impact of the targeted change at both the individual and group levels (change consequences and individual job impact, respectively), the findings represent a fairly conservative test of the hypotheses.

Fifth, the factorial structure of change leaders was replicated in a separate sample. Despite slight differences in item loadings, the connotations of the two factors that emerged from the two independent samples were consistent.

A sixth strength lies in having included many different changes across multiple organizations in one study, which allows for significantly greater generalizability than does relying upon the findings from either just one change or from one organization. Instead of focusing on one particular type of change, the current study included multiple types of changes with different magnitudes and studied their impact across different organizations. Research has often been bounded by the type of change and magnitude of the change when studying its impact. With increased rates of change occurring in today's business environment, it is often not what has been changed or how we have changed it, but the fact that change, *per se*, creates uncertainty and turbulence in organizational life (Herold et al., 2007). Thus, treating change as a generic stressor allows us to understand more fully how leadership behaviors during organizational change can influence individuals' attitudes.

Finally, previous research has warned about the possible hindsight effects of using retrospective methods. The current study minimized the possible confounds of hindsight effects by choosing changes that were either just finished or very close to completion (median completion level of 94.8%).

For limitations, although the transformational leadership ratings had high levels of within-group agreement and were aggregated to the group level, they were assessed in the same survey as commitment to change, so same-source bias may have heightened the relationship between the two. Future studies should look at ways to reduce same-source bias in these relationships. This can be accomplished through the use of time series data or through the use of separate sub-samples.

A second limitation is that I included only affective commitment to change as the outcome for current study. A number of other reactions and responses may be important to the successful implementation of a specific change. As leaders' change-selling behavior and change-implementing behavior had different psychological effects on affective commitment to change, it is possible that change-implementing behavior, as transactional and external drives, would have stronger effects on compliance during change (i.e., normative and continuance commitment to change), while change-selling is more effective in evoking affective reactions. It is important for future research to investigate the potential relationships between the two sub-dimensions on followers' affective, cognitive, and behavioral reactions to change. In addition, the ultimate interest in studying leadership behaviors in change situations is to understand the impact of these behaviors on employees' actual support of change initiatives and the subsequent success

rate of the change implementations. Future research should include such outcome variables at different (i.e., individual, group, and organizational) levels.

Third, as previously discussed, leadership effects need to be studied within their relevant social contexts (Hogg & van Knippenberg, 2003). While the current study focused on one aspects of such social context — employee commitment to the larger organization, it would be appropriate for future research to include the relationship between leader and member as this relationship is very proximal to leadership effects. For instance, Wang et al. (2005) found that the effect of transformational leadership on followers' performance was mediated by leader-member exchange (LMX). Research also suggested that LMX works to reduce subordinates' negative reactions to change (Furst & Cable, 2006; Self et al., 2008). Given that the commitment process involves volition, emotion and motivation (Allen & Meyer, 1991), it is possible that LMX plays an important role in change leadership especially in the change-selling stage. Therefore, inclusion of additional contextual factors, such as LMX (Wang et al., 2005; Furst & Cable, 2006; Self et al., 2008) and perceived organizational support (Eisenberger et al., 1997), could add value to the change literature.

Finally, future studies should investigate change leadership and outcomes over time using longitudinal designs for the following reasons. First, the change leadership concept has evolved from the change process literature (Porras & Robertson, 1992; Woodman, 1989; Kotter, 1996) which suggests the inherent longitudinal nature of change. Change implementation theories have argued that different sequences of implementation steps and strategies can alter their effectiveness (Pettigrew et al., 2001) and that different contingencies may also lead to different outcomes of alternative change sequences

(Martins, 2008). Therefore, it would be beneficial to explore the sequential effects of change leadership behaviors and their potential contingencies.

A second reason that longitudinal studies are needed is to eliminate the possible confounding of commitment to change and affective organizational commitment. Along with other variables in the study, affective organizational commitment was measured when the change was either recently accomplished or very close to being finished. The cross-sectional design did not allow for accessing levels of organizational commitment prior to the change. Therefore, it is difficult to draw definite conclusions concerning the causal relationship between organizational commitment and commitment to change.

A third reason is that the increased frequency of organizational change has blurred the boundaries of discrete change episodes and has intensified the extant discussion regarding the temporality of organizational change (Tsoukas & Chia, 2002; Weick & Quinn, 1999). Longitudinal designs may help us to better understand the underlying differences between and similarities of the two types of leadership that have been linked to organizational change. It is possible that each of the leadership behaviors has a different impact as change processes unfold, and assessing them only once at the end of the change may obscure the true relationship between the two.

CONCLUSION

Organizational change has been and continues to be an important field of study. This study demonstrates the importance of leaders' long-term investment in their followers in gaining support for a specific change. Successful change management requires followers' attention, which appears to come, at least in part, from leaders' change-selling behavior, transformational leadership style, and employees' affective commitment to the organization. More important, as the results of this study suggest, high affective organizational commitment is a critical factor in gaining commitment to a change through either transformational or change leadership, that is, the influences of leadership influences are more effective for those affectively committed to their organizations.

APPENDIX A

Scales of Change Leadership and Transformational Leadership

Final Scale for Change Leadership

Leaders' Change-Selling Behavior

Related to the specific change we are studying, my leader...

1. made it clear up front to those in our unit why the change was necessary.
2. made a case for the urgency of this change prior to implementation.
3. successfully enlisted other to help with this change before we really started.
4. inspired people in the work unit to embrace the change.
5. built a broad coalition up front to support the change.
6. prepared people beforehand for adjustments they would have to make once the change was underway.
7. Effectively communicated the vision for the change prior to implementation.

Leader's Change-Implementing Behavior

Related to the specific change we are studying, my leader...

1. was sensitive to how things actually were done "in the old days" prior to the change.
2. was fair in addressing any negative consequences resulting from the change implementation.
3. worked to minimize the impact of the change implementation on people in the work unit.
4. helped people deal with the pain of change implementation.

5. empowered people to implement the change.
6. provided resources needed to support the implementation.
7. provided regular feedback on how the change implementation was going.
8. carefully monitored and communicated progress of the change implementation.
9. gave individual attention to those who had more trouble with the change implementation.
10. modeled expected behavior for subordinate during implementation.
11. celebrated short term wins during change implementation.

Transformational leadership

I believe my leader...

1. seeks new opportunities for our organization.
2. paints an interesting picture of the future for our work group.
3. has a clear understanding of where we are going.
4. inspires others with his/her plans for the future.
5. is able to get others to commit to his/her dream(s) for the future.
6. leads by “doing” rather than simply by “telling”.
7. provides a good model to follow.
8. leads by example.
9. fosters collaboration among work groups.
10. encourages employees to be “team players”.
11. gets the group to work together toward the same goal.
12. shows subordinates that he/she expects a lot from them.

13. insists on only the best performance for us.
14. does not settle for second best from subordinates.
15. acts without considering individuals' feelings (reverse).
16. shows respect for individuals' feelings.
17. behaves in a manner that is thoughtful of individuals' personal needs.
18. treats people without considering their personal feelings (reverse).
19. provides individuals with new ways of looking at thing which are puzzling to them.
20. has ideas that have forced individuals to rethink some of their own ideas.
21. stimulates individuals to think about old problems in new ways.
22. develops a team attitude and spirit among his/her employees.

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